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Accounting Review

AMERICAN ACCOUNTING ASSOCIATION

ANNUAL FINANCIAL REPORT

FOR YEAR 1946

ERNEST C. DAVIES, *Secretary-Treasurer*

REPORT OF SECRETARY-TREASURER

The net income of the General Fund for the year 1946 was $2,921.06, an increase of $1,068.94 as compared with the net income of 1945. This was due to an increase of $1,302.95 in total income without corresponding increases in the expenses. With exception of the Convention expense and an increase in the cost of publication of the Accounting Review (largely due to increased printing costs) the expenses decreased or remained about the same as last year. The increased cost of the Accounting Review will be more pronounced next year.

The income from all sources increased, with the largest item being the increase of $607.64 in the combined item of subscriptions and sales of single issues. In this connection it is of interest that the student subscribers increased from 453 in 1945 to 1,023 in 1946.

The net income of the Life Membership Fund also showed an increase due to larger sales of the Monographs and to the fact that all publication costs had been taken up in previous years.

The changes in membership during 1946 were as follows:

	Life	*Regular*	*Total*
Number of members at January 1, 1946	23	1,504	1,527
New members	2	131	133
	25	1,635	1,660
Resignations and deaths	1	42	43
	24	1,593	1,617
Dropped for non payment of dues		47	47
Members at December 31, 1946	24	1,546	1,570

The addition of 131 new members is of special interest in view of the fact that no membership campaign was conducted during the year.

The Auditor's report which follows gives the details of the income of the General Fund and the Life Membership Fund together with the financial condition of each of these funds at December 31, 1946.

Ernest C. Davies
Secretary-Treasurer

AUDITOR'S REPORT

In accordance with the request of the Executive Committee, I have made the annual audit of the books and records of the Association for the year ended December 31, 1946. The financial statements summarizing the results of this audit, together with auditor's certificate, are annexed hereto.

The books and records of the Association were maintained in an excellent manner. During the year under review, several changes were made in the records and office methods which have greatly facilitated the audit procedure. Full information was made available to the auditor.

Harry D. Kerrigan
Auditor

January 17, 1947

AMERICAN ACCOUNTING ASSOCIATION
BALANCE SHEET—GENERAL FUND
DECEMBER 31, 1946

ASSETS

Cash		$10,897.98
U. S. Savings Bonds—Series F:		
Maturity Value	$3,400.00	
Less—Bond Discount	816.00	2,584.00

Accounts Receivable:

	Gross Value	*Reserve for Bad Debts*	*Net Value*	
Dues	$253.00	$125.00	$128.00	
Subscriptions	138.31	45.95	92.36	
Single Issues	31.00	15.00	16.00	
Advertising	180.00	—	180.00	
Totals	$602.31	$185.95	$416.36	416.36

Office Equipment (Nominal Value)	1.00
Total Assets	$13,899.34

LIABILITIES AND SURPLUS

Payable to Life Membership Fund		$ 741.09
Deferred Income from Dues and Subscriptions		2,463.79
Surplus:		
Balance, January 1, 1946	$7,773.40	
Net Income for 1946	2,921.06	10,694.46
Total Liabilities and Surplus		$13,899.34

AMERICAN ACCOUNTING ASSOCIATION
STATEMENT OF INCOME AND EXPENSE—GENERAL FUND
YEARS ENDED DECEMBER 31, 1945 AND 1946

	1945	*1946*
Income:		
Dues	$5,498.50	$ 5,944.10
Subscriptions	2,615.61	3,003.77
Advertising	1,400.50	1,637.50
Sales of Single Issues	(Note A)	219.48
All Other	29.19	41.90
Total Income	$9,543.80	$10,846.75
Expense:		
Publication		
Accounting Review	$4,123.11	$ 4,581.84
Membership List	366.07	270.59
Compensation		
Editor	500.00	500.00
Secretary-Treasurer	500.00	500.00
Committees		
Executive	428.66	224.49
Education	225.15	34.40
Clerical	401.29	662.90
Printing, Postage and Stationery	374.04	303.84
Reprints	259.33	131.14
Election	115.76	—
American Institute Mailing	120.59	37.78
Bad Debts—Dues	75.00	138.00
Convention	—	314.62
All Other	202.68	226.09
Total Expense	$7,691.68	$ 7,925.69
Net Income	$1,852.12	$ 2,921.06

Note A: Included in Subscription Income.

AMERICAN ACCOUNTING ASSOCIATION

BALANCE SHEET—LIFE MEMBERSHIP FUND, DECEMBER 31, 1946

ASSETS			
Cash			$2,720.98
U. S. Savings Bonds—Series F:			
Maturity Value		$7,400.00	
Less—Bond Discount		1,765.60	5,634.40
Accounts Receivable:			
General Fund		$ 741.09	
Other, Less Bad Debt Reserve of $28.20		69.80	810.89
Total Assets			$9,166.27
LIABILITIES AND SURPLUS			
Royalty Payable			$ 8.58
Surplus:			
Contributions from Life Members:			
Balance, January 1, 1946	$2,600.00		
Additions for 1946	200.00	$2,800.00	
Transfers from General Fund		5,000.00	
From Operations:			
Balance, January 1, 1946	$ 734.89		
Net Income for 1946	622.80	1,357.69	9,157.69
Total Liabilities and Surplus			$9,166.27

AMERICAN ACCOUNTING ASSOCIATION

STATEMENT OF INCOME AND EXPENSE—LIFE MEMBERSHIP FUND

YEAR ENDED DECEMBER 31, 1946

Income:		
Sales of Monographs:		
No. 4	$ 307.00	
No. 3	307.62	
No. 2	22.90	$ 637.52
Bank Interest and Bond Discount Earned		116.09
Total Income		$ 753.61
Expense: (Note A):		
Royalties	$ 59.49	
Bad Debts—Monographs Accounts Receivable	32.00	
All Other	39.32	130.81
		$ 622.80

Note A: Publication cost of monographs has been charged off in year of payment. The estimated inventory value of Monograph No. 4, on cost basis, is $541.27 as of December 31, 1946.

AUDITOR'S CERTIFICATE

I have made an examination of the following financial statements of the American Accounting Association:
Balance Sheets: as of December 31, 1946:
General Fund
Life Membership Fund
Statements of Income and Expense for year Ended December 31, 1946:
General Fund
Life Membership Fund

In connection with the above examination, I have reviewed the accounting procedures of the Association, and examined its accounting records and other evidence in support of the financial statements listed above. The examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which were considered necessary.

In my opinion, the above-mentioned financial statements, which are annexed hereto, present fairly the Association's financial position and results of operation for the stated date and period, with respect to each fund, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

For comparison, the statement of income and expense for 1945, general fund, is also included.

Harry D. Kerrigan

January 17, 1947

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EXPERIENCE AS A NECESSARY QUALIFICATION FOR THE CPA CERTIFICATE*

Ira N. Frisbee

In the fifty years since the first law was enacted to license certified public accountants, there have been increasing efforts toward standardization within the profession. Particularly in recent years, these efforts have been in defining auditing procedures and standards, in setting forth accounting principles, in establishing rules of conduct, and in setting up rules of practice for the preparation of statements for the Securities and Exchange Commission and for other purposes. Although it is generally recognized that complete standardization of accounting practices and of auditing methods is neither attainable nor desirable, yet the progress in promulgating generally accepted rules has contributed greatly to the stature of the profession. Wide variations in standards of practice and of conduct, and in defining or applying accounting principles, cannot be tolerated if our profession is to command the confidence and the respect of our clients and the public.

For the most part, the progress toward uniformity has been on a national scale through the efforts of national organizations, such as the American Institute of Accountants and the American Accounting Association. Some state committees have been active on problems of auditing procedures and standards, accounting principles, and professional conduct, but in general they have cooperated with the Institute. Also, some 44 of the states, as well as the several territories and the District of Columbia, have cooperated by adopting the Institute's uniform examinations for the CPA certificate. That uniformity must be on a national scale is obvious; it is difficult to conceive of effective uniformity or standardization on the basis of rules that are accepted only in certain individual states. For a strong profession, accounting principles and auditing standards and procedures must be recognized on a national basis; they must apply to accounting in Maine and in Florida, in New York and in California.

LEARNING THROUGH MISTAKES

From a theoretical standpoint, at least, it would appear that the education and training of accountants for the profession should also approach uniformity on a national scale. Certainly the professional standards envisioned by committees of the American Institute of Accountants require, for realization, a high degree of proficiency for all certified accountants entering the profession, and such proficiency cannot be attained without high standards of education and training.

When I speak of "education and training," I mean schooling both in classrooms and in actual accounting work. Classroom

* A paper before the Association of Certified Public Accountant Examiners, September 30, 1946.

education attempts to train by illustrations which simulate actual business transactions. But training is not complete until accounting problems are met, and mastered acceptably, in actual business enterprises. In fact, training is never ended, because there are always problems that are new, or at least different, for most practitioners even after decades of experience in public accounting.

The important question for CPA examiners, therefore, is: "What type and how much training must a candidate have before he can be allowed to practice?" This question, of course, includes formal education or training in accounting schools or colleges, as well as what is termed "practical experience" in accounting work, and particularly in public accounting. Theoretically, the answer to this question should be the same in one state as in another. And it is reasonable to believe that approximate uniformity in answering the question will affect the degree to which high standards of public accounting practice are adopted and maintained throughout the nation. If, in some states, little or no training is required before candidates enter the profession it is possible, but by no means certain, that some will obtain additional education and practical training before practicing on their own account. But others, having the stamp of approval from a CPA board, will plunge into engagements for which they are not qualified and will make mistakes which a longer training period would have prevented.

We must recognize that a portion of our education is obtained by making mistakes, particularly in the period of early training. For example, in classroom teaching of accounting, it is my belief that students should be *guided* in their learning rather than *lectured* in correct answers. The teaching technique of allowing them to do their own reasoning, even if it leads to somewhat incorrect conclusions, will, if the reasoning and the conclusions are corrected, produce more fundamental and useful knowledge than the direct teaching of specific answers to specific questions. Similarly, in gaining practical experience, some mistakes will be made if a self-reliant type of training is given. But the trainee requires the guidance and the correcting of the mistakes which can be obtained only if he is working for someone who is charged with responsibility for his work. If he enters public practice without this training or guidance in actual public accounting work, or its equivalent, he may never learn some of his fundamental mistakes and others may be discovered too late.

EXPERIENCE EDUCATES

What is the nature of the practical public accounting training which we should require for the CPA certificate? First, I think the candidate needs to learn how to prepare working papers. In classrooms, he may receive an introduction to audit working papers by working an artificial and abbreviated audit problem. But until he assists in preparing papers on several real audits and has an opportunity to review audit jobs in preparing reports from the working papers, he does not have an understanding of the purposes and techniques of preparing adequate papers. I mention working papers, first because they are the means of controlling the auditing work on an engagement and are essential to accuracy and completeness, as well as to proper analysis and presentation of the results of the audit examination. Surely, a licensed certified public accountant should have had training by experience in preparing these papers before starting his own practice as a CPA.

Second, the candidate requires practical experience in applying the auditing procedures of which he has read in textbooks and heard in class lectures. Unfortunately, auditing is not merely a matter of pro-

cedures. There are many processes which are taught as "usual procedures," and yet the extent to which each process is to be carried out, and the secondary procedures which may be indicated by the primary, cannot be taught adequately in classrooms. Only an introduction to the problems of applying procedures in audits can be given in a simulated problem in a college course.

Then, too, the application of procedures in an actual audit includes the development of the auditor's point of view. This can be done only by actual practice. What is the auditor's point of view? In classrooms I usually state that the auditor's attitude in his work is necessarily analytical, critical, and skeptical. Although these characteristics can be described and even emphasized in the classroom, each student must find out in practice whether he has the inherent and latent capacity to develop the particular analytical, critical, and skeptical qualities needed in choosing and applying auditing procedures or techniques. I have seen students who could learn all the textbook methods and were naturally skeptics and critics and had enough analytical ability to work examination problems. Yet, when they were placed in actual auditing work it was found that they lacked a fourth characteristic, namely the ability to synthetize, to combine the right auditing methods on a particular engagement and to see the engagement as a whole, as well as in its individual parts. All these four qualities must be developed by the CPA candidate through practical experience in applying the auditing procedures he has learned. Until he has had the seasoning gained by experience, these qualities will not be adequately developed.

There is a third essential requirement of an auditor's training to make him eligible for the CPA certificate. This is experience in preparing accounting reports, including the financial statements. Frankly, I am amazed when I stop to think of the many problems there are in presenting balance sheets and operating statements which are not adequately answered, directly or even indirectly, in textbooks. The field of accounting problems is so broad that textbooks necessarily are abbreviated and the text material relates chiefly to simple or usual cases. In many cases even the reference books give incomplete answers to individual problems. Therefore, the prospective CPA must have the practical schooling of experience in applying simple principles to some of the difficult problems in order to present clear and complete accounting statements.

Practice in preparing the textual portion of an audit report also is an important part of the CPA's training. Before the candidate begins his on-the-job training, he should be schooled in English grammar and composition, and he should have a knowledge of the usual components of the audit report. But to qualify as a certified public accountant he should also have had several opportunities to write actual reports, under supervision, and particularly should have acquired the ability to recognize the essential matters to be covered in textual presentation.

There is a fourth type of training which is desirable for a candidate, although perhaps it is not so essential as the three previously named. This is the training in human relations which an accountant's office should afford. The CPA should know how to obtain the cooperation of his client's staff and of his coworkers on an accounting engagement. Before he becomes a certified public accountant, he should have some experience in directing junior assistants and in taking responsibility for engagements or important parts of engagements. In short, the candidate must experience the transition from the classroom, where the emphasis is on describing *what* is to be done, to the job,

where he finds not only *how* it is to be done but how to direct others in doing it.

PRIVATE AND PUBLIC EXPERIENCE

Does public accounting offer the only means of gaining practical training or experience? Also, if it is to be accepted, to what extent should private or governmental work be allowed as a substitute for public accounting work? In this connection, it is to be noted that in some twenty-six states[1] the practical experience requirement may be met by private or governmental work. In some cases the law and the board rules do not specify very clearly the work which will be accepted, whereas in other states the acceptable experience is limited to auditing work in state offices or as a Federal internal revenue agent. Five years ago, the Association of Certified Public Accountant Examiners voted to permit the substitution of this type of accounting work for an amount not to exceed one-third of the public accounting experience. Perhaps this is an opportune time to reconsider that decision.

Governmental or private auditing, it seems to me, should be accepted only if it gives approximately all the four types of training I have mentioned above. In short: (1) Does it offer adequate training in the preparation of working papers? (2) Does it afford experience in applying a variety of audit procedures and techniques? (3) Does the candidate learn to write textual reports on the financial condition and operations of the period, and does he prepare formal financial statements? (4) Are the conditions such as to further his assumption of responsibility and the development of tact in working with others? My own conclusion is that most private and governmental auditing work does not ordinarily provide as broad and complete training in these particulars as public accounting does.

Of course we must recognize that there are various grades of experience in public and in private work. In accepting private or governmental auditing experience, I think we should be sure that in each individual case it has resulted in a training equal to at least the average training a candidate might receive in a period of public accounting. For each applicant who seeks to substitute experience we should investigate particularly as to the type of working papers he has prepared, the variety of audit procedures he has used, the nature of the financial statements and reports he has prepared, and the types of problems he has encountered in preparing them. Usually this will require one or more interviews with the candidate, as well as written evidence in the form of letters from informed employers and accountants acquainted with the candidate's work.

In California, the board of accountancy now is allowed to substitute even for a total of four years of public accounting "experience in private or governmental accounting or auditing work of a character and for a length of time sufficient in the opinion of the board to be equivalent" to the public experience requirements. To date, I believe only three certificates have been granted under this provision to candidates without any public accounting experience, but in several cases credit for approximately one year of experience has been given. To be considered for any credit, the experience must be in high grades or classifications of Federal or state auditing work which afford the variety and character of training specified above. In fact, it is my belief that the character

[1] States which do not require that the experience be in public accounting, or which allow substitution of "equivalent" experience, according to permissive provisions or exceptions in their laws, are: Alabama, Arkansas, California, Georgia, Idaho, Iowa, Louisiana, Maine, Minnesota, Mississippi, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

of the work is more important than the period for which substitution is to be permitted. If the training is "equivalent," it is likely to be of a character which is entirely acceptable for a full four years, or for whatever period public experience is specified. However, in each case in which substitution is allowed, the adequacy of the particular experience of the candidate must be reviewed carefully in order that the members of the board may have an informed opinion.

STATUTORY EQUIVALENTS

A reading of the Accountancy Acts of the forty-eight states, the District of Columbia, and the territories of Alaska, Hawaii, and Puerto Rico indicates that in thirty-four of these political subdivisions[2] it is possible, for one reason or another, that a CPA certificate may be obtained without even one day of public accounting experience. In three of these jurisdictions, the laws or the rules of the boards indicate that no accounting experience of any sort is required. In several states experience in private accounting work appears to be generally acceptable, although in some cases the waiver of public accounting experience is dependent upon sufficient technical education in higher accountancy. In eleven states[3] specified governmental experience, such as service as an internal revenue agent or in other Federal or state auditing work, is accepted.

In fairness, we must recognize that the opportunity for over one-half of the states to issue certificates to candidates who have had no public accounting experience does not necessarily mean that many such CPA certificates are issued, and certainly it does not indicate that any number approaching one-half of the CPA certificates are issued without a basis in public accounting experience. In most of the jurisdictions, public accounting appears to be either the preferred or an acceptable experience and, in fact, usually any substitute must be "equivalent" in the opinion of the board of accountancy. Sometimes in place of the requirement of "equivalent" experience, the law requires that the experience outside public accounting be of a character and for a period of time which meets the approval of the board, and it is possible that such approval is seldom obtained in the states which have this provision.

In those states in which some public accounting experience is specified or required, the amount varies materially, and the experience credit given for technical education in accounting classes varies also. A summary of these variations in experience required, and in the combinations of college training and practical experience, would be lengthy and probably of limited value. The objective sought, obviously, is a proper minimum total of training, whether in accounting study, or on the job, or by both methods. As previously indicated, it is my opinion that there is no substitute for practical accounting experience and, for the most part, such experience should be obtained in public accounting. However, it is logical to believe that some technical school training also should be required. The fact that five states accept this training in lieu of practical experience is interesting because it shows that some legislators have rated the technical education as equal to, or at least as a substitute for, practical work.

Actually, I think our goal should be the uniform recognition of the necessity for both classroom education and practical experience without diminution of the latter because the candidate has the former.

[2] These states include the twenty-six listed in the preceding footnote; Delaware, Montana, and Pennsylvania, which have no experience requirement; and Arizona, Maryland, North Dakota, Oklahoma, and Tennessee with waivers for accounting school students, college graduates, or college graduates with technical accounting education.

[3] Alabama, California, Georgia, Iowa, Minnesota, Mississippi, New Jersey, North Carolina, Virginia, West Virginia, Wyoming.

Classroom education should not be just a means of preparing for the CPA examinations; it should provide a fundamental part of the training of a professional person. If we are to increase the standing of the profession, we must seek to standardize the minimum entrance requirements for CPA practice in all states at a level which includes both technical and practical training. And I believe that we should hope ultimately to agree upon the number of years of college work, of accounting study, and of practical experience. Perhaps it is reasonable to anticipate that not too far in the future all states will require a college degree, together with adequate courses in accounting and in related subjects, and at least three years of public accounting experience.

AN AUDITING TEACHER LOOKS AT THE CPA EXAMINATION IN AUDITING

Francis E. Moore

The training of students in auditing courses for the passing of the CPA examination in auditing is, of course, considered secondary to the successful training of those students to the extent that they are enabled to enter the public accounting profession well qualified to perform expeditiously the auditing tasks assigned to them. While this examination is not the major objective of the students or their instructors, it does provide the accepted measurable means by which the technical knowledge of the applicants is judged. This article, presented from the viewpoint of one who has had years of public accounting experience and who is a teacher of auditing in a metropolitan university, reviews this medium, the auditing phase of the CPA examination, in an objective manner, and presents material for consideration and discussion on various phases relating to the subject.

THE TREND IN RECENT YEARS

In the October, 1943, issue of The Accounting Review an article entitled "Classification of Auditing Questions" appeared, in which were shown the results of a study made by Howard F. Stettler wherein he reviewed 192 examinations in auditing which had been presented between 1896 and 1941; in the same issue of that magazine A. C. Littleton made several interpretative observations relative to the results of this study and classification. The questions in the 1930–1941 period (one of four chronological periods used in the study) were classified in the following major groups:

Questions on auditing procedure (procedures for verifying specific accounts and auditing special types of enterprises, steps preliminary to audit, etc.)	34%
Questions on auditing theory (auditor's responsibilities, certificate qualifications, evaluation and the use of evidence, etc.)	28%
Non-auditing questions (theory of accounts, statement presentation, systems and costs, etc.)	38%
Total (707 questions)	100%

The author of the present article has made a review of the examinations prepared by the Board of Examiners of the American Institute of Accountants as presented from 1942 to May, 1946.

In the examinations of the past five years, as compared with those of the 1930–1941 period, there has been a marked trend away from the non-auditing type of question toward three groups of questions requiring the candidates to submit (1) those procedures to be followed in the audit of certain specified accounts, (2) those procedures to be adopted under certain specified (at times, unusual) conditions, and (3) those procedures relating to the audit of enterprises having specialized accounting systems. Some portion of the change in make-up of the auditing examinations in this period is undoubtedly due to the adoption in 1943 of the examination in theory of accounts as a separate phase of the CPA examination.

Questions relating to the procedures for the verification of current assets composed approximately 40 per cent of those relating to the audit of specific accounts. The influence of the bulletin on "Extensions in Auditing Procedures" (approved at the American Institute of Accountants annual meeting in September, 1939) may be seen in the emphasis placed on the topic in the auditing examinations of this period. Three of the subjects of that bulletin—examination of inventories, confirmation of receivables, and the form of the independent certified public accountant's report—were the basis of several questions. The questions which dealt with accounts receivable related to the form of request for confirmation (positive or negative) and the procedures to be adopted in their use and follow-up. There were several questions during this period pertaining to physical inventories; two of these, given in successive examinations (May, 1945, 10 points; November, 1945, 8 points) were identical in the wording "Enumerate the features to be especially noted by an independent public accountant in the observation of a physical inventory, and state the purpose of such auditing procedure." Questions dealing with the report included those in which the examinee was asked to name or explain the essential elements of the short form of report, or to give the qualifying effect thereon resulting from certain conditions named in the problem.

An increase in the number of questions with respect to the verification of income and those dealing with the subject of internal control gave recognition to the emphasis placed on these phases of accounting and auditing in contemporary publications. The presentation of one question on deferred charges and prepaid items (insurance) and one on intangible assets (patents) during the period reviewed does not appear commensurate with the extent to which the applicant might expect his knowledge of these phases to be tested.

In the examinations reviewed there were several questions (composed of three or more parts, in some instances) which required knowledge of the procedures to be adopted in the audit of enterprises having specialized accounting systems such as stock brokers, private schools, charities, and municipalities. The choice of enterprises by the examiners does not appear to have varied much over the period 1896–1946. The assignment of questions of this nature in examinations brings criticism from some who believe that, while it is advisable to test the ability of the examinee to adapt his knowledge of principles to specialized cases, the examinee who is without intimate contact with any of the specialized fields named is at a disadvantage when his answer is compared with a standard set for the examination by those candidates who are fortunate enough to have had actual practice in those

specialized fields. This, of course, presents a basis for argument for those teachers who advocate, for all such examinations, the adoption of the type that includes a number of elective questions; the unfortunate applicant cited above might then turn to a question in a field familiar to him, thereby proceeding on a basis more nearly equal to that of his neighboring aspirant who is familiar with the specialized field named in the problem. Such an election is provided the candidates in the accounting theory and law portions of the CPA examinations.

In the auditing examinations of the 1930–1941 period there were fifteen questions associated with income taxes included in the classification of auditing procedures prepared by Stettler which was previously mentioned. There were no questions relating to income tax included in the auditing examinations of the past five years; questions on this subject have been made a part of other phases of the CPA examinations in recent years.

One question relative to cost accounting procedures was presented in the auditing examinations of the period. This concerned the manner of the treatment of direct-labor overtime premiums, a subject on which there appears to have been considerable difference of opinion among the members of the National Association of Cost Accountants, as evidenced by their replies to a questionnaire on excess labor costs sent to its members by that organization and summarized in a 1941 research bulletin.

One question during the period (November, 1945, 30 points) required the submission of a complete audit program for a business with which the applicant was acquainted, his answer to be graded with due regard to the complexity of the business chosen. While this provision as to grading may have been intended only to place the candidate on notice that he should not select the simplest business with which he was acquainted, there are some instructors who dislike the possible psychological effect of suggesting to a candidate that his answer will be graded according to its complexities. It is interesting to note in this connection that 46.4 per cent of those sitting for the auditing examination of which this 30-point problem was a part, were successful, as compared with 24.4 per cent who passed the previous examination in auditing which included no questions of this nature.

RECOGNITION GIVEN TO CONTEMPORARY AUDITING DEVELOPMENTS

Some instructors and prospective examinees may ask first whether the CPA examinations in auditing require the applicants to keep step with the latest developments, pronouncements, and emphasis in the public accounting field; whether, for example, recent graduates of accounting courses (without any material amount of practical experience) should be expected to be familiar with the bulletins of the American Institute of Accountants committees on accounting and auditing procedures, the accounting releases of the Securities and Exchange Commission, and current emphasis in accounting publications when they present themselves for examination. In this connection, the level of performance expected in these examinations should be kept in mind, and accounting students and others should recognize this as a significant factor in their preparation for the CPA examination. At a meeting held in September, 1941, the Association of Certified Public Accountant Examiners adopted a 14-point program, one portion of which was that "The CPA examination should be set at a level to test the ability of the candidate to qualify as a senior accountant."[1]

[1] *1941 Year Book*, American Institute of Accountants.

The extent to which the examinations have given recognition to the bulletin on "Extensions in Auditing Procedure," and the emphasis placed on the verification of income and on the subject of internal control have already been mentioned in this article. Some other bulletins of the American Institute of Accountants Committee on Auditing Procedure on which there were recent related examination questions are:

#2—The Auditor's Opinion on the Basis of a Restricted Examination (examination of November, 1942)

#4—Client's Written Representations Regarding Inventories, Liabilities, and other Matters (examination of November, 1945)

#16—Case Study on Inventories (inventories stacked in solid formation) (examination of November, 1944)

Examination questions during the period which related to the rules of professional ethics of the public accountant were given in May, 1946, relating to Rule 12 about the signing of a published statement as to expected earnings; in May and November, 1943, relating to the subject of SEC Accounting Release #47 on the matter of the auditor's independence. While these did not necessarily pertain to rulings or releases issued during the years of the examinations, they did represent questions on a subject on which there had been increased emphasis during that period. This emphasis on the rules of professional ethics continues, the most recent noteworthy addition being the book entitled *Professional Ethics of Public Accounting,* written by John L. Carey, Secretary of the American Institute of Accountants.

There appears to be no question but that the examinations of the past five years have given definite indication that the student in auditing should be prepared to find questions included in the auditing phase of the CPA examination that will test his knowledge of the current opinion on subjects within that realm.

THE FORM OF THE EXAMINATION

In considering the fact that usually not more than 50 per cent of the candidates have been successful in passing the CPA examination in auditing—at times, less than 25 per cent—an auditing teacher might well inquire to what degree the classroom preparation of the students was deficient; whether, for example, more time should be spent in the classroom on certain phases of the subject of auditing, whether the form of presentation of questions in the CPA auditing examinations differs from that with which the former auditing student is familiar, etc. It is certain that a teacher, or his superiors, should give careful consideration to all phases of the college subject in which less than 50 per cent of the students had passed the final examination in some of the years it had been presented.

It is difficult to compare the form of the CPA examination in auditing with classroom examinations in this subject since, in the various colleges, there is a lack of uniformity in classroom presentations. There are, however, certain underlying characteristics of effective questions shown in the various textbooks on educational methods. These are that an effective question must be clear, brief, and definite; that excessive use of the "discuss" type of question should be avoided; that the question should center on one idea; that "catch questions" and questions that suggest the answer should be avoided; that the questions should take into consideration the time allotted for the answers. It can reasonably be said that the auditing phase of the CPA examination meets these measurements successfully.

In all courses in the CPA examination subjects (accounting theory and practice, commercial law, and auditing) the student should be given the opportunity to become familiar with the form of the CPA examination by being given questions chosen

from, or patterned after, those appearing in recent CPA examinations. Such presentation in the classroom should be preceded by the instructor's recommendations as to the form or style best fitting the solutions of a CPA examination. It is not sufficient to leave such training and preparation to a CPA review course or to be worked out by the student later.

OPPORTUNITY FOR BETTER CURRICULUM

The extent to which the aptitude tests for public accountants (now being prepared under the direction of the American Institute of Accountants Committee on Selection of Personnel) are developed and made ready for measurement may very well have considerable influence on the future outlines for education in the field of public accounting, especially as to the training that will be given in the auditing courses of the future. These measurements will consist, in part, of achievement tests made (1) for students who have completed one full year of accounting study; and (2) for college graduates, who have majored in accounting, at about the time of graduation. When the plan was outlined in the January, 1945, issue of this publication by the Institute's secretary, Mr. John L. Carey, he listed as one of its objectives the desire to find through these tests and the study of the results thereof, "what if anything can be done to encourage colleges and universities to train men specifically for public accounting as contrasted with other types of accounting work."[2] It is assumed that foremost among the recommended changes will be those pertaining to courses in auditing, for although the knowledge of the subjects dealt with in the examinations in accounting theory and practice and in commercial law is a basic requisite of the public accountant as well as the accountant employed in other capacities, it is principally in the auditing courses that men are specifically trained in colleges and universities "for public accounting as contrasted with other types of accounting work." The weakness in this auditing phase of curricula has already been publicly recognized in the report of the conference of the two committees on education of the American Accounting Association and the American Institute held in Chicago in June, 1945, at which conference it was concluded, as to the training for public accounting, "that the principal weakness in technical training is in the field of auditing."[3]

In a review of the four-year undergraduate courses which offer an accounting major for a degree one finds that the subject of auditing is often assigned to one, or two, of the last three semesters of an eight-semester course; in some college curricula it is crowded into the closing 15 weeks of the final year, just as a course on income tax procedure often is. The most that can be expected of a two-semester course in auditing is to furnish the students with the fundamental principles of auditing theory and practice through lecture material and the use of a text, accompanied by problem material or an audit practice case. In a two-semester course the limited time precludes the possibility of covering such a program adequately and also considering such important phases of auditing training as the study of the basic bulletins and releases, the procedures to be adopted in some specialized industries, the auditor's relationships with his clients, and the requirements of recent legislation.

A feature that appears inherent in accounting curricula is that a student must complete the advanced accounting courses as prerequisites to admission to auditing classes. This seems to be at variance with

[2] John L. Carey, "The Development of Aptitude Tests for Accountants," Accounting Review, January, 1945.

[3] *Certified Public Accountant*, October, 1945.

the fact that training in public accounting is a continuous process in which, as one progresses in the study of auditing, he also progresses in his knowledge and fuller understanding of the underlying accounting principles involved. Most textbooks in auditing bear out this idea and present the auditing theory and practice together with the basic underlying accounting principles in somewhat equal emphasis. The foreword to the original edition of *Auditing* by William H. Bell (now in revised edition by Bell and Johns) states that " . . . the subjects of accounting and auditing are so interrelated that in many cases discussion of auditing principles has called for some consideration of accounting theory as well; in fact, there are some subjects, notably capital assets, with respect to which the purpose of auditing is essentially the determination of the observance of the correct accounting principles, and wherever it has seemed desirable the outstanding features of those principles have been presented."

An accounting curriculum that presents a two-year (junior and senior years) course in auditing concurrently with two years of advanced accounting courses—advanced accounting problems, CPA problems, specialized accounting, etc.—might well be considered to be in step with the textbook presentations of auditing and provide a more thorough, comprehensive, and practical background for the students planning to enter the field of public accounting. Such a course as outlined herein is predicated on the student's having at least three semesters of accounting training before entering his junior year and also predicated on the adoption by the college of a system of aptitude tests, thus weeding out those not qualified to maintain the high standards that would be required for the two-year course in auditing.

One may look ahead to the time when the results of the aptitude tests of the American Institute of Accountants have been generally adopted as measurements by colleges. Due recognition is given by the author of this article to the systems of aptitude tests already incorporated in the curricula of many colleges; at the same time it is realized that the standard tests promulgated by the Institute will bear a closer relationship to the characteristics and training required in the profession of public accounting. The giving of aptitude and achievement tests to students who have completed their sophomore year of accounting study may result in advising some aspiring accounting majors to shift to some other course in the college or otherwise change their emphasis. Therefore, by the beginning of the junior year, those remaining in the accounting major courses will have had the opportunity to show that they have the qualifications which would make their continuance in such courses desirable.

The fundamentals of auditing theory and practice would be presented in the first year of auditing, preferably with a liberal amount of problems or with the concurrent use of an audit practice case. At the end of that first year a further elimination of those not qualified as public accounting material will undoubtedly have resulted through failure to meet scholastic standards, or as a result of advice by the instructor, or as a result of an extensive auditing achievement test.

In the second year of auditing (the student's senior year) the outline for the year might be broadened to somewhat of a seminar basis, the scope of which would be to a degree dependent on the caliber of the students and the facilities available. It would include classroom discussions of such subjects as the bulletins of the American Institute of Accountants and SEC accounting releases. Discussion of the rules of professional ethics and the liabilities of the independent public accountant could well be incorporated in such a program.

Training in report writing in this second year of auditing could be accompanied by the review of current published annual reports and an analysis of certain features thereof. In metropolitan locations it would be possible, without doubt, to obtain the services of a principal of a local public accounting firm to address the class on such a subject as the general organization of a public accounting office. In some locations an arrangement could be effected with the education committee of the state society of public accountants whereunder a limited number of students would be allowed to attend the technical sessions of the society and report back to their class on the matters discussed at those meetings.

The possibilities of this type of auditing study in the senior year seem varied and numerous—all tending toward the educational development of the auditing students, toward providing the public accounting offices with better material, and toward better qualified candidates for the CPA examinations in auditing.

THE LOGIC OF THE COST AND REVENUE APPROACH

D. H. Mackenzie

According to D. S. Robinson, logic is the science of knowledge.[1] It analyzes and investigates the way we think, and attempts to formulate the rules followed in correct thinking, and those followed in the accumulation of knowledge. Any field of knowledge, such as physics, is built up by the utilization of our thinking processes to arrive at principles, laws, hypotheses, and definitions, which provide the fundamentals of that field.

The first great treatises on logic were written by Aristotle, whose work on the syllogism, deductive reasoning, and reasoning from generalizations to particulars was exhaustive. The starting point of the syllogism is the major premise (a conceded truth) which is determined from sense data and from facts of experience, which are the primary sources of all knowledge.[2] This is followed by a minor premise (conceded truth), and a conclusion drawn from the two premises. The weakness of the syllogism is that the major premise may be false, in which case the reasoning may be logical but the conclusion false.

Dissatisfied with the deductive method, Francis Bacon developed the inductive method, often called scientific method, the procedure of which is the opposite to that of the deductive method. Bacon maintained, and his argument is correct, that only in mathematics can we see that something is universally true; that we cannot prove the truth of major premises. He argued that we must arrive at generalizations by trial and error, enumeration, observation, statistical sampling, and experiment. However, the inductive method is subject to the same weakness as the deductive method: the generalization can never be proved to be universally correct.

Among the many groups dissatisfied with the logic of Aristotle and Bacon are the pragmatists, of whom John Dewey is a leader. They believe that regardless of

[1] *The Principles of Reasoning* (D. Appleton, 1929), p. 1.

[2] Maritian, Jacques, *An Introduction to Logic* (Sheed and Ward, 1937), p. 161.

the laws or principles we derive by deduction and induction we may in the future discover better ones. They would test an idea by tracing it to its consequences. The test of a proposed principle would be, "Does it work?" In other words, does it make sense? The critics of this philosophy believe that the test "Does it work?" is, among others, a good test of truth but by no means the only one, and that the converse "If it does not work, it is not correct" is an adequate test. Will Durant states that the philosophy of the pragmatists is valid if it is interpreted to mean "truth is that which has been tried, by experience and experiment."[3]

Even though deductive and inductive methods cannot provide us with principles that can be proved to be universally true, they have provided the foundations of all great bodies of knowledge. And the test of the pragmatists, "If it does not work, it is not true (valid)," has been very useful in the accumulation of knowledge.

We do not need universal truths from which to proceed. Hypotheses have been invaluable in all fields of knowledge. An hypothesis is an assumed or tentative explanation of factual data, and as such serves a very useful purpose until it is proved correct, or until something better has been found. When verified an hypothesis becomes a principle, a verified explanation of factual data. In other instances we may, from factual data, derive a law or laws, such as the law of gravitation. When we have an explanation of a law, the law then becomes a principle; thus a law may also be a principle.

Definition is also useful in the structure of knowledge, although of minor importance. The purpose of definition is that of giving complete meaning to a term, and thus it is very useful in communicating knowledge from one person to another. Logic analyzes definitions and attempts to give us rules for their formulation. Some writers discount the value of definitions, and it is true that their importance should not be exaggerated. However, Robinson says that although definition is not a cure-all and end-all, and is really a subordinate part of logical doctrine, there still is "no need to to throw to the dogs all that is not fit for the altar of the gods."[4]

It has already been explained that, except in mathematics, we cannot (even in the physical sciences) derive principles which we can prove are universally correct. We may always find better ones. However, a principle can be used until one is found which explains the facts better or which explains a wider range of facts. It can never be shown that a principle is empirically valid, but it is possible to prove a principle invalid by showing important discrepancies between it and observable fact.[5]

In his foreword to *An Introduction to Corporate Accounting Standards*, Howard Greer states " . . . the haphazard development of accounting principles over the years has produced wide variations in actual practice. . . . "[6] Greer might as well have said: "The assumption that accounting is primarily a process of valuation has produced wide variations . . . " for accounting has been treated as a process of valuation, and discussions of valuation have composed a substantial part of the literature of accounting. This, of course, has been a natural step in the evolution of our field of knowledge, a field which has developed from a simple mathematical equation. But many accountants have long been dissatisfied with the valua-

[3] Durant, Will, *The Story of Philosophy* (Garden Publishing Co., 1927), p. 564.

[4] *Op. cit.*, p. 61.

[5] See Geo. Stigler, *The Theory of Price* (The Macmillan Company, 1946), p. 7.

[6] Paton and Littleton, *An Introduction to Corporation Accounting Standards* (American Accounting Association, 1940), p. v.

tion hypothesis. It has not only resulted in wide variations in actual practice but has failed to provide principles from which we can reason logically and arrive at conclusions that correspond with observable facts.

As the accountant faces unfamiliar problems, he cannot meet them by applying principles of valuation; he has to learn how to handle these individually. His first ideas on accounting are conveyed to him in terms of valuation, but he soon learns that accountants do not usually practice valuation but account for a certain type of costs. The valuation hypothesis can be proved to be false by demonstrating that it does not correspond with observable facts. All one need do is consider his own experience, and he will realize that accountants practice valuation only in exceptional instances. Professor Canning, in his *Economics of Accountancy*, conveys the impression that factual data prove that accounting is primarily a valuation process. He states that, in the preparation for his treatise, he studied thousands of accounting reports.[7] He then develops a very fine work in formal logic; it is logical in the sense that his reasoning from his premises is above criticism. Professor Canning undoubtedly found that accountants practiced valuation in some instances, and since his work was done in the hectic twenties, it was done at a time when valuation was practiced probably more than in any other decade. However, any cursory statistical study would show that even then accountants practiced valuation in only a very small part of their work, the vast portion of which was in accounting for a certain type of costs. These remarks are not meant to disparage the fine work of Professor Canning, who has probably done as much as any one person to stimulate thought in accounting. They are simply to bring out that in the present writer's opinion the premise from which Canning develops his subject is not valid.

The Executive Committee of the American Accounting Association has for many years been working on the unsatisfactory situation in accounting theory, and as is well known has produced two reports,[8] both considered tentative. It is probably needless to state now that any exposition of accounting principles will be only tentative; we may always find better ones. In these reports the Committee has adopted, among others, two hypotheses: (1) that accounting is primarily a process of accounting for monetary outlay costs; and (2) that it is a process of matching costs with revenue. That such hypotheses are reasonable ones and work satisfactorily can be demonstrated by observable facts, facts evident to accountants if they think of their own experiences. The proponents of these ideas undoubtedly contemplated their own experiences in accounting and reasoned that accounting for outlay costs was the almost universal practice, that it provided the type of information desired by management, investors, and others. (In those rare instances in which valuation data were pertinent, they could be supplied by supplementary notations.) These cost hypotheses are empirical ones (inductive); the facts were observed and from these facts hypotheses were advanced which in the opinion of this writer have sufficient verification and sufficiently explain the facts to warrant their being considered principles. Certainly we have not yet found better ones.

The procedure followed by these accountants is analogous to that followed in making many of the great discoveries of science. Facts were studied, and through

[7] Canning, John B., *The Economics of Accountancy* (Ronald Press, 1929), p. lv.

[8] The Executive Committee of the American Accounting Association, "A Tentative Statement of Accounting Principles Underlying Corporate Financial Statements" (ACCOUNTING REVIEW, June, 1936).
Paton and Littleton, *op. cit.*

reasoning gaps were filled. The "matching idea" fills a gap that existed in accounting practice. In deriving it, accountants had to reason from the facts and fill in something that was not clearly obvious in practice. Actually this matching of costs with revenue was what accountants were trying to do (though they did not realize it) and they were doing it rather crudely since they were reasoning from a valuation hypothesis.

It is the writer's opinion, after considerable experience with the application of the matching idea, that this principle makes its greatest contribution, not in making accounting more objective as some assert, but in providing a principle that can be used in a great part of our accounting work. It does not eliminate the judgment of the accountant, but it does provide a principle of surprisingly wide application. As Paton has well explained, no distinction need be made between costs incurred for merchandise and those incurred for selling or administrative purposes. Any of these costs that are costs of the current revenue are expenses, and any that are costs of revenue of future accounting periods are considered to be assets. It may be, and usually is, easier to measure and allocate some of these costs than others, but the principles are still the same.

Let us consider a few other cost and revenue situations. All the costs of obtaining the services of buildings and equipment are costs that should be matched with revenues. Some of these are recorded by depreciation entries, and we match these as accurately as we can with the revenues to which they apply. The capital and revenue charges are no different in principle. The cost of repairing a foundation is a cost of the revenues that benefit from this expenditure, and an attempt should be made to match such a cost with revenues. Accounting for consignments, installment sales, and partly completed contracts are simply applications of the same principle. Adjustments are an integral part of the matching process.

Let us apply the matching principle to sales discounts, sales returns and allowances, and collection expenses. Most accountants would agree that it is logical to deduct in a particular accounting period all the sales discounts, etc., that result from the sales of that period. In fact, it is difficult to justify any other policy except on the grounds of expediency. Under the matching principle it can be seen that such deductions should be matched with sales, and if this is not done by the accountant it is only because the amounts are so small that they will make no material difference in the profit. Since these amounts can be estimated with reasonable accuracy, it would seem that sound accounting would demand that we estimate them just as we estimate bad debts and record them by the reserve method.

Under the matching principle bad debts are computed by the percentage-of-sales method. Under the valuation principle bad debts should be determined by the percentage-of-the-reserve-to-receivables method. This latter method, as is well known, results in wide variations in the charges for bad debts, the amounts charged often bearing little relationship to the sales of the period. Anything that causes the reserve to change affects the amount of the bad debts of the period. Experience has demonstrated that the percentage-of-sales method is the more satisfactory, yet we cannot logically justify this method if we reason from valuation principles.

The matching principle explains the operating profit as that profit obtained from the matching of costs with revenue. It does not explain classification, but no principles will do that. Classification is a means to an end, and that end is information; different types of information require different types of classification.

As stated before, our chief difficulty with the matching principle is that of measurement. We frequently find that a reasonably accurate matching of costs with revenue will cost more than the results so obtained are worth. However in most instances this difficulty (which also exists under the valuation approach) causes no great discrepancies. At any rate the important point is that we have a principle from which we can reason logically and arrive at conclusions that correspond with observable facts, facts that have been found from experience to work. Inability to measure accurately does not nullify the principle; and if we find the need for more accurate measurements we will undoubtedly find the means. Possibly we should be paying more attention today to means of measurement.

Must we explain, in terms of costs, assets like cash and accounts receivable, and also liabilities? The answer is, in the writer's opinion, no. There is nothing in logic that requires us to explain everything in the same terms. However, there is nothing contradictory between the principle of accounting for monetary outlay costs and the methods we have always followed in recording these other assets and liabilities. In fact, the methods are consistent. In accounting for monetary outlay costs we set the rule for accounting for cash; cash then becomes the connecting link between costs and these other items. Of course, with very little stretching of our imagination, we can treat these items in terms of costs.

But it seems to the writer that Professors Paton and Littleton went a little further than was necessary when they treated all assets and liabilities in terms of costs. This treatment introduces an element of unreality which is just the contrary of what the cost principles have done for those assets that have always been handled as unamortized costs. The cost principles have been empirically derived from actual practice. Must we extend them to assets that are not unamortized costs, and to liabilities? We gain little by doing so. In fact, we may possibly weaken our principles by making them unrealistic. We get all the good out of the cost principles if we apply them only to the "unamortized costs."[9] In trying to account for everything in the same terms, accountants are probably influenced by Canning's criticism, that in accounting we are doing something analogous to the adding and subtracting of apples and oranges (hence Canning treats liabilities as negative assets). Canning has really answered his own argument when he admits that we are adding and subtracting dollars; the dollar is our universal common denominator, and this idea works satisfactorily.

Must the cost principles explain why we record information on liabilities and proprietorship? Again the answer is, no. The definition of a field of knowledge covers what is to be investigated. The physical chemistry approach to chemistry does not explain everything that is done in chemistry. In a field of knowledge such as physics we find dozens of principles, hypotheses, laws, and definitions, composing that body of knowledge.

Must we trace everything in accounting back to our "first beginning," to costs? It would be nice if we could. It would greatly simplify our art and science if we could proceed step by step, as in Euclid, through our whole field of knowledge. As yet, except in a mathematical science, we do not find this simplicity of development in a world of reality. John Bates Clark's great treatise on *The Distribution of Wealth* is a masterpiece of formal logic. From the assumptions he has made, he reasoned out

[9] If we consistently apply this principle, the proper recording of capital stock naturally follows.

step by step a complete, cohesive, marginal-productivity theory of distribution. It is a magnificent piece of work and the reasoning is so logical that it is a pleasure to read. However, it is out-of-this-world. The assumptions under which Clark had to proceed simply remove the treatise from reality.[10]

Under the cost approach should we abandon the equation, Assets=Liabilities +Proprietorship? We may if we wish, but is it desirable to do so? Some accountants think that this equation is inconsistent with the cost approach. The present writer does not believe it is. But even granting that it is, he believes that we can logically retain it on other grounds. He believes—and most accountants will no doubt agree—that it is the best way to present the bookkeeping aspects of our subject. Why not keep it for that purpose? Isn't this equation just as much a truism under the costs principles as it is under the valuation approach? Once the student understands assets in terms of costs (not in terms of valuation), he can easily see that the creditors and the proprietors are the sources of assets; therefore, Assets must equal Liabilities plus Proprietorship. It is difficult to find a more self-evident truth than this in other arts and sciences, and yet those fields use such self-evident truths (axioms) whenever it is of advantage to do so. They do not insist that everything be traced back to the first beginnings of their area of knowledge. Why should we so restrict ourselves? We could treat debits and credits by rule. Canning did this, and it was done under the old journal approach. But if this is done we lose the logic of the double-entry system, and it is difficult to find any more logical development of the subject matter of bookkeeping (not of accounting theory).

Furthermore, even if logic demanded that we trace all accounting principles back to first beginnings, we can present a good case for different first beginnings for debits and credits. We can reasonably argue that accounting and bookkeeping principles are different. Accounting principles (the principles of accounting for costs, revenues, assets, liabilities, and proprietorship) would exist even if the equation and double entry had never been heard of. It is possible to keep our accounting data on memorandum records. This writer does not advocate it, but it has been done and is being done. Double entry is the recording aspect of accounting; it is the methodology of recording data worked out by accounting principles. It is simply a means of putting our data down on paper. Under cost principles we can use this or any other method that would give us the required information. The method is only incidental to our principles. Under the traditional approach the entire body of accounting principles is built up on the bookkeeping equation. Isn't this relationship analogous to that of engineering drawing and bridge design? The bridge designer uses his knowledge of materials and the laws of force in designing his bridge. He records his ideas by means of engineering drawing, the principles of which are entirely different from those of bridge design since they are derived from descriptive geometry. And engineering drawing is just as indispensable to the engineer as is bookkeeping to the accountant. Both workers would be helpless if they did not know how to record their data.

In teaching accounting today, it is the general practice to teach bookkeeping and accounting together, and this practice causes no confusion on the part of the student. At the University of Washington, after we cover the cost principles and as-

[10] See Lester, R. A., "Shortcomings of Marginal Analysis for Wage-Employment Problems," *American Economic Review*, March, 1946, p. 63. Also, Homans, Paul T., "Issues in Economic Theory," *Quarterly Journal of Economics*, No. 42 (May, 1928), pp. 344, 361.

sets and liabilities, we explain to the student that he could record this information on scratch paper or by almost any type of memorandum records; that, so far as accounting principles are concerned, the method of recording is unimportant if only it provides the information we need. We then explain that fortunately a very logical method of recording accounting data has been worked out, the double-entry system of bookkeeping. In engineering, engineering drawing is a prerequisite to almost all courses. Possibly we may require bookkeeping as a prerequisite to accounting courses; a scrutiny of university catalogues reveals that a few universities are now doing this. Whether or not this is desirable in accounting has not yet been established.

We have now in accounting a great body of knowledge built up in a relatively short period of time by such men as Hatfield, Kester, Paton, and others, to whom we are all greatly indebted. Now that the war is over we should be ready to advance still more, and it seems to this writer that the important contributions of these authors have indicated the direction we must take. We must not, however, retard the development of our subject by false conceptions of the nature of logic. During the Middle Ages, most fields of knowledge became stagnant and sterile because of the attempts of the scholastic churchmen to reduce all reasoning to the syllogism. It took Galileo with his observations on astronomy and gravitation, and Gilbert with his experiments on magnetism, to stimulate new efforts toward the accumulation of knowledge. We in accounting must not devitalize our great field of knowledge; we must remember that it is not a mathematical science.

RECRUITMENT FOR THE PROFESSION*

WARREN W. NISSLEY

THERE is no doubt but that the importance of the services which professional accountants are capable of rendering to the community is not fully appreciated in the United States. While there has been substantial improvement in this connection during the last twenty years, much remains to be done. I believe one important reason why we are not better recognized is that we have not been rendering all the public service of which we are capable. In particular, we have as a profession, and as individual members of it, been backward in advising the public of facts of which our practitioners should be more cognizant than any other segment of our population. Moreover, many of these facts must be appreciated by the ordinary citizens if they are not to be swept off their feet by political demagogues.

Examples of the type of facts I refer to are the following:

1. The productive capacity of the United States is largely the result of inventive genius and the development of so-called mass production methods.
2. Genius is not man-made but is a gift of God. It is more improvident to waste genius than any other natural resource.
3. Neither invention nor production methods would have reached the heights they have if our political system had not permitted the individuals responsible therefor to receive an incentive in the form of adequate compensation or profit.

* Section of an address before the Dominion Association of Chartered Accountants in Montreal, Canada.

4. Various methods proposed for determining compensation or profit for an individual or for an enterprise would have very different effects as compared with the automatic computation thereof resulting from the disposition of goods or services to the highest bidder in a free market.
5. Control procedures are necessary in order to be certain that markets are kept free.
6. There are important ultimate implications in any statement saying, in effect, that no man's services, regardless of his genius, are worth more to his fellow citizens than, say, $25,000 per year after taxes.
7. There are questionable ultimate effects on labor itself of a wage policy based on paying each workman the same amount per day regardless of what he produces during the day.
8. There are provisions in our state corporation laws, or in the charters of particular corporations, which are not likely to prove beneficial to the creditors or stockholders who presumably are to be protected by such provisions. No group, other than the lawyers who devised them, is more capable of calling attention to such provisions than accountants.

There is surely no group with better opportunity to predict the effect of different treatment of these problems in the actual operation of business. And, since accountants have joint responsibility to labor, capital, and management, and have no axe to grind, no other group is more capable of independent observation on these subjects.

While it might not be appropriate to express a professional opinion as to the ultimate action which should be taken, I believe we should consider it a duty to assume leadership in advising the public as to the results to be expected with respect to matters such as these, under the various possible alternative courses of action. To do this, we would need to develop the proper medium through which our comments would gain publicity. Certainly our neglect to report our observations on these subjects cannot be expected to increase our stature in general or the appeal which our profession offers to young men.

My remarks up to this point relate to the kind of additional activities which we might undertake to increase our standing in the community—and hence our prestige with young men about to choose a career. This sort of thing can help accounting only over the long future. For our immediate objective, it is necessary for us to give additional publicity to the importance of the work which accountants now do. It is particularly necessary that we do this in terms that will add some atmosphere of glamour to the work of the profession. I am afraid many young men still think of the professional accountant as one who deals with dusty books and adds up long columns of figures.

When they try to relate the public accountant to other people at all, he is likely to be thought of as a rather petty, and not very admirable, character who helps to put behind prison bars the—to them—romantic young man, whose horses did not back him up when he used his employer's money to bet on the races, with the idea of entertaining his girl friend more adequately on his winnings. Certainly, the characteristics of the few accountants who have been featured in fiction, the movies, or on the stage would not add much glamour to our occupation. We are better regarded by the adult population; and our profession has a higher social standing and commands more respect in those few countries where it has been in existence longer. But new blood must come from the youthful element, and it is to them that we must direct our appeal.

We have relied too much in our recruitment publicity on merely listing the type of services we offer: accounting services, auditing services, tax services, system and cost accounting services, etc. It would have more appeal to our young men if we showed them that we are an integral and an essential part of the modern business world. More and more that world consists

of corporate units. Each unit represents a pooling of the wealth of many persons who, for practical purposes, lose direct control of that wealth as soon as it has been pooled. The importance of the corporation is bound to increase. Enterprises must have available to them ever greater pools of wealth to support the necessary research and to provide the machinery and equipment necessary for economical production. On the other hand, the incidence of taxation, including inheritance taxes, will make it impossible for a single individual or a small group of individuals to acquire sufficient wealth in the future to carry on great enterprises alone. Fortunately, the aggregate amount of wealth owned by all individuals is continually increasing. The pooling process is the only answer to social necessities.

Unlike the bodies which move about in our celestial universe with such remarkable precision, the corporate bodies which make up the business world are not subject to divine control and they too frequently acquire characteristics similar to those of meteors and comets. The only practicable method thus far developed by which man can control the detached complicated corporate bodies which he has created is through using the information in the reports on their activities prepared by professional independent accountants. Newspaper reporting has always been regarded as one of the most glamorous occupations. I believe we should refer more often in our recruitment efforts, to the reporting features of our occupation.

Accountants are of the opinion that, regardless of his other qualifications, a man is not likely to be successful in this profession unless he has mental ability of a high order. In the United States, practically all of this type of men now manage to get to college somehow or other. It is obvious therefore that the college graduates represent about the only pool of young men available to us.

In the middle 1920's it was rather unusual for a member of a professional accountant's staff to be a college graduate. This situation probably developed because relatively few leaders of the profession at that time had had the advantage of a college education. When they were young it was not common for even the most intelligent young men to go to college and many men with good minds received their training in the school of life. A study made at that time showed that only 194 of the 874 members of the American Institute of Accountants who were admitted to the Institute during the ten years ended with 1926 were college graduates; 349 of them were high school graduates; and 331 did not even have the benefit of a high school education.

To meet this situation, a committee of the Institute, which was set up in 1926 and of which I had the honor of being chairman, distributed directly to students then in college many thousands of copies of a booklet which attempted to describe the work of the professional accountant and the importance of his work in our economy. As a result of its activities, which were continued directly for several years and the effect of which is still felt today, a large number of college graduates have been brought into the profession.

Inquiries made by us in 1926 indicated that the average native mental ability of the students then majoring in accounting in our colleges was not so good as the average ability of the students majoring in other departments. Consequently, our original appeal was to all college graduates, regardless of what they had studied in college, and few commerce department graduates were actually accepted during the early years.

During the ensuing years, students in colleges have become more familiar with professional accounting work, and most

practitioners have gradually come to the conclusion that men obtained from the colleges are the best type of young men to engage as beginners on their staffs. During this period the quality of the students in the collegiate schools of business also has improved substantially. Laws have been passed in several states, beginning with New York, which require graduation from an approved college or school of accountancy as a requisite for the Certified Public Accountant certificate. As a result of these conditions, we are now looking more and more to the collegiate schools of business for our raw material. In fact, it is probably safe to say that we now look to that source almost exclusively. It is obvious that we would rather have a man with the proper kind of native ability and personality, as well as with training in accounting and auditing. When we had to choose between one or the other, we felt we could give the men the necessary technical training, but we could not give them brains.

The increasing importance of the pool of college graduates to us is shown by the following summary of new members admitted to the Institute from 1916 to 1944:

Period	*Number of members admitted*	*Percentage who were college graduates*
10 years ended Dec. 31, 1926	874	22.2
7 years and 8 mos. ended Aug. 31, 1934	700	34.0
7 years and 7 mos. ended Mar. 31, 1942	2,218	42.6
2 years and 2 mos. ended May 31, 1944	989	51.5

The unusual periods above have no significance. They end on dates as of which analyses of the educational qualifications of members had been made for other purposes. Lest I may be accused of not accounting for all new members, I should point out that these figures do not include the members admitted in connection with the merger with the American Society of Certified Public Accountants. Many of those men had been in practice a long time before the merger.

College professors and personnel advisers exert a substantial influence on the decisions reached by many students as to their occupation after graduation. It is necessary to have these guidance officials properly informed about our profession. The Institute Committee has recently authorized the distribution for their use of many thousands of copies of a new brochure describing the work of the profession, which was prepared by the Committee on Education.

Every practitioner should regard recruitment as a constant personal responsibility. We should be willing to take the necessary time to describe our work to any promising young man with whom we come in contact. If we recognize that this problem exists, there is no doubt that we can solve it in a reasonable period of time.

Most, if not all, of the other well-recognized professions have professional schools, of college or postgraduate rank, in which students are trained solely for work in the respective professions. I believe the public accounting profession is entitled to, and ultimately will have, similar schools. However, for many years I have said publicly that I do not believe we now have a single institution which considers that its job, or even one of its principal jobs, is to train men for our profession. So far as I am aware, that statement has never been challenged. I do not mean to say that we have no colleges that offer courses in accounting. When I looked into the matter in 1933, I found that a report of the Office of Education of the Department of Interior stated in its Circular No. 94 that there were then 1,808 courses in accounting and business statistics offered by 436 colleges and universities in the United States. At that time, there were 1,060 instructors and 76,912 students in these courses. I presume the corresponding numbers at the present

time would show a large increase.

Now one of the principal functions of a strictly professional school is to sift out students not suitable for the profession for any reason. Under such conditions, any graduate may be considered a reasonable prospect to enter that profession. Since we could not absorb more than one or two thousand graduates per annum, it seemed obvious to us that we would need to develop our own screening process to find suitable assistants from graduates of accounting courses numbered in the tens of thousands each year in addition to the far larger number graduating from other departments of the colleges.

In 1926, the committee adopted a rule-of-thumb procedure whereby we considered only those men who graduated in the highest 25 per cent of their class as rated by their respective colleges. We received quite a jolt as to the safety of this method when the present project in aptitude testing was launched. Among his many activities, Dr. Wood has been in the past Director of the Cooperative Test Service of the American Council on Education. He informed us that uniform examinations in various subjects had been given in many colleges for a number of years under the auspices of that organization. The startling thing he told us was that the records indicated that there were practically no students in the lowest 10 per cent of these colleges who received a score as high as the lowest score received by any student in the highest 10 per cent of the colleges. An obvious method to meet this situation would be to eliminate from consideration all students from the lower ranking colleges. Unfortunately, the arrangement between the Test Service and the colleges provides that no one can be advised as to the standing of the students in a particular college other than the college itself, except for Haverford College, which thus far has always stood first. While it is easy to understand that a college would not cooperate in the testing program unless its sins were kept from the light of day, such conditions do not develop confidence among the users of college products.

We of necessity, decided to develop our own testing procedures. We believe that the fitness of a particular individual for the profession should be determined by appraising his qualifications separately as to the following points:

1. Does he have the minimum native intellectual ability required for successful work with us?
2. Has he had adequate training in the necessary techniques?
3. Would he be interested in the kind of work we do?
4. Has he the requisite common sense and judgment necessary for our work?
5. Are his personality and character satisfactory?

The research director of the committee tells us that known uniform testing procedures can be adopted to measure the first three qualities but that the prospective employer will need to continue to decide upon the last two by his own methods. It is very important to keep in mind that decisions as to employment must be based on combined considerations of all factors.

ADVANCES IN GOVERNMENTAL ACCOUNTING

T. Coleman Andrews

Comprehensive auditing of government corporations had its inception in Section 5 of Public Law 4 of the Seventy-ninth Congress. This law was originated as the George Bill. It was passed February 24, 1945. On December 6, 1945, a second law was enacted concerning corporations which contained somewhat similar provisions as to auditing but also provided for budgetary and other controls. This was the Government Corporation Control Act. It was officially recorded as Public Law 248 of the Seventy-ninth Congress, and is sometimes familiarly referred to as the Whittington Bill, or the Byrd-Butler Bill.

For all practical purposes, the auditing requirements of these two laws are the same. However, the George Bill applies to the fiscal years ended June 30, 1945, and 1946, and the Government Corporation Control Act applies to fiscal years beginning with that ending June 30, 1947.

Following are the portions of the George Bill which are most pertinent to this presentation:

> The financial transactions of all Government corporations shall be audited by the General Accounting Office in accordance with the principles and procedures applicable to commercial corporate transactions and under such rules and regulations as may be prescribed by the Comptroller General of the United States. . . .
>
> The audit shall be conducted at the place or places where the accounts of the respective corporations are normally kept. . . .
>
> A report of each such audit for each fiscal year ending on June 30 shall be made by the Comptroller General to the Congress not later than January 15 following the close of the fiscal year for which the audit is made. . . .
>
> The report shall set forth the scope of the audit of each corporation and shall include a statement (showing intercorporate relations) of assets and liabilities; capital and surplus or deficit; a statement of surplus or deficit analysis; a statement of income and expense; and such comments and information as may be deemed necessary to keep Congress informed of the operations and financial condition of the several corporations, together with such recommendations with respect thereto as the Comptroller General may deem advisable, including a report of any impairment of capital noted in the audit and recommendations for the return of such Government capital or the payment of such dividends as, in his judgment, should be accomplished. . . .
>
> The report shall also show specifically every program, expenditure, or other financial transaction or undertaking which, in the opinion of the Comptroller General, has been carried on or made without authority of law. . . .

The first fiscal year for which audits were to be made was that ended June 30, 1945. Reports are addressed to the Comptroller General and transmitted by him to the Congress, one copy to each house. That to the House of Representatives is sent to the Speaker of the House. That to the Senate is sent to the President of the Senate. Copies go to the President of the United States, the corporations, the Treasury Department, and the Bureau of the Budget.

Each report is printed, and a limited number of copies may be obtained from the House Document Room. Whenever there is public demand for as many as 500 additional copies of any report, the Government Printing Office will print an additional supply for sale at from ten cents per copy up, according to the size of the report.

The General Accounting Office is reimbursed by each corporation for the cost of each audit of its affairs. The cost of each audit is determined by the Corporation Audits Division in the same manner that public accounting firms determine the

costs of their engagements.

When this activity was created, the Comptroller General determined that it was a job for men educated for and experienced in public accounting; and having made this determination, he turned to the American Institute of Accountants for advice as to the finding and selection of qualified personnel. This was a hard order to fill in the spring of 1945; the war was still going on in all theaters, and the military services and war agencies and industries had every member of the profession tied up who otherwise might have been available.

But this was no ordinary request. The Comptroller General presented it as a challenge to the profession, and the Institute Council, to which it was presented, was quick to recognize and accept it as such. The compilation of a list of members who might be available was started immediately and was ready for the director-to-be when he arrived shortly thereafter. No one on this list could be had immediately, and only a handful could make shift to join us at all; but this handful demonstrated the power of quality over quantity, and with this group the activity was started.

About the time that the Comptroller General met with the Council, money to carry on the new activity was provided in the First Deficiency Appropriation Act of 1945. This Act also empowered the Comptroller General to employ ten men outside the General Civil Service Classification Act. These men were to be the director, the deputy director, and the assistant directors. This Act also empowered the Comptroller General to employ public accountants and other technicians on a professional basis to audit or otherwise appropriately serve such of the corporations as the Comptroller General might determine.

As a final organizational step, the Comptroller General gave the new activity a divisional status in the General Accounting Office by putting the management of it in a new unit of the Office known as the Corporation Audits Division; and to the director of the new Division he gave such authority as the director felt he needed in order to assure doing what was the equivalent of a public accounting job in the manner that public accountants would do it. I am happy to be able to tell you that the Comptroller General has undeviatingly supported the director in his exercise of this authority.

We got under way with a token force in October of last year, and, in spite of discouragements that many times caused us to wonder whether the kind of staff we wanted could ever be assembled, we have succeeded in obtaining to date a total of 210 men. We need 300, and we believe we will have them before too long. Our greatest need at the moment is for men of supervisory grades. These grades carry starting salaries ranging from $7,200 to $9,000 per annum. We need about twenty men of this grade.

The director, the deputy director, and all the assistant directors except two, one of whom is not responsible for auditing, are certified public accountants of long experience in public practice. Two-thirds of all our staff from the level of senior up are certified men of varying lengths of practice. Four-fifths of the entire staff are veterans.

We started off with 101 corporations to be audited. The combined resources of these corporations at June 30, 1945, were nearly thirty billions of dollars. Directly and indirectly, their activities ran the whole gamut of industrial, commercial, and financial affairs, and their operations spread over most of the world.

All the audits for the year ended June 30, 1945, have been started. Several have been completed and the reports thereon

rendered. Most of those on which reports are still to be rendered are nearing completion. Some audits for the year ended June 30, 1946, also have been begun. We hope to be ready for the audits for the year ending June 30, 1947, when the time to start them arrives.

In the meantime we have undertaken, and either completed or advanced nearly to completion, several complementary engagements for departments and other noncorporate agencies of the government, including an audit survey of the currency and civil supplies accounts of the Army in Europe, the latter with the very able and highly commended services of two prominent members of the profession, who undertook the engagement at great sacrifice and inconvenience to themselves and their associates.

The organization of the Division is very simple and highly flexible. It is headed by the director, and he is assisted by the deputy director and eight assistant directors. The staff is set up about as is usual with large public accounting offices, consisting of managers, supervisors, seniors, semi-seniors, and juniors, with perhaps more weight in the upper grades and less in the lower than is usual in public practice, since full recognition is given to effective internal control in laying out audit programs and making the audits.

The selection of personnel is done at the directorial level, this being the responsibility of an assistant director. This officer also has the responsibility for all administrative affairs of the Division, although he handles such matters through an assistant known as the administrative officer.

Plans are under way which contemplate the establishment of research, economic study, and other needed auxiliary activities.

The deputy director has the over-all responsibility for getting the auditing work of the Division done. An assistant director is made responsible to the deputy director for each audit, including the preliminary survey and audit program, the carrying out of the audit in accordance with the program, and the writing of the report. A preliminary survey and the preparation of an audit program are prerequisites to the beginning of every audit. Reports are reviewed by the deputy director and finally the director, before they go to the Comptroller General for his review and approval.

Our reports have one feature that is unique if not original. Immediately following the introductory paragraph of submission there follows a summary of the highlights of the auditors' findings. This is done in order to conserve the time of members of Congress and other readers. It apparently has done much to promote general understanding of what otherwise might be clear only to those who have had considerable exposure to the sometimes unavoidable intricacies of auditors' reports.

Another feature is the certificate, which, though common in commercial practice, perhaps might not have been expected in our reports. We do not give certificates freely, and the fact that we have omitted certificates in some cases—always with a statement of our reasons for the omission, of course—has had a salutary effect upon the corporations involved and prompted others to start putting their houses in order.

Our reports also contain statements of the origin, permitted and actual activities, organization, financing, management, and other aspects of the corporations' affairs, these being deemed essential to keeping Congress "informed of the operations and financial condition of the several corporations." Otherwise the members of Congress would have little opportunity to find out independently what the corporations are doing.

I have intimated that the standards of qualifications for employment in the Division are high. We have purposely made them so. A prerequisite of acceptance is a bachelor's degree in accountancy or business administration, or the equivalent in experience in public accounting. This is based upon the conviction that we cannot do a professional accounting job with clerical help. As a result, our staff is well equipped for the job it has to do.

We intend to keep our staff so equipped, of course. To this end we have instituted a program of in-service training, consisting of a course of sixteen lectures, with written problems and periodic review and discussion sessions. This course covers the administrative organization and management of the government, accounting and auditing requirements peculiar to government corporations, and accounting and auditing generally. It is compulsory for all juniors and semi-seniors and voluntary for all other grades; and it is under the direction of a staff member of the highest academic and practical qualifications. These classes will be supplemented by CPA review classes and coaching on CPA problems.

To give further assurance of high standards of performance, we employ a rating system under which each member of the staff is rated on a carefully selected list of characteristics at the end of each quarter and each engagement. Under this system the strong are commended and promoted as fast as possible and the weak are helped, if they can be helped; if they can't be helped, they are let go. To a very large extent the proficiency of the managers and supervisors is judged by their ability to make good accountants and auditors of their assistants. Anybody can fire a poor or mediocre employee. It takes a supervisor who is really good to make a good product out of doubtful material.

We believe that public affairs can be managed with the same effectiveness as the affairs of private enterprise, and though we are not out just to prove this, we believe that strict adherence to the policies I have stated will place and keep the auditing of government corporations on a plane that will do high credit to the accounting profession and the government and warrant the unqualified confidence of the public.

We members of the profession to whom the immediate responsibility for the administration of the George Bill and the Government Corporation Control Act has been entrusted regard ourselves as representatives of the profession in this undertaking. We see in what we are doing the broadest conceivable opportunity to develop the tremendous potentialities of the techniques of our profession as implements of simplification and economy in the organization and management of public affairs. This, therefore, may be regarded as a report of our stewardship. We hope that the results of our efforts thus far are worthy of the confidence of the profession.

I am ambitious to see our profession advance its public service. We have been slow to develop the degree of influence upon the formulation of important public policies of which we have been potentially capable. I am convinced that this influence can be attained only by acts of public service, not merely by high-sounding pronouncements, nor by scattered and uncoordinated individual efforts. If the profession is to have high standing and influence in high places, it must recognize that it, as well as its individual members, has a duty to organize, coordinate, and put to work in the public interest the aggregate of the talents and experience of its membership.

Our American way of life is peculiarly one in which all classes must contribute to the common good. But there is a dangerously extensive tendency abroad in the land not merely to neglect our duty as

citizens but to leave it to the other fellow. The ultimate consequence of this attitude is obvious, I think. If we persist in it, we are going to wake up one of these days and find ourselves on the short end of an autocracy or absolutism of one kind or another and forever barred from having a voice in the decisions that vitally affect the right of self-determination that was so dearly bought for us by the blood and lives of our forefathers.

It was with intense gratification, therefore, that I found, upon returning home from my duties overseas, that during my absence the profession had more frequently brought the weight of its judgment to bear upon matters of public concern on which it was qualified to speak.

Two facts as to the status of our public affairs ought to be sufficient to make us realize that we must go on down to the bottom. It was recently reported that the combined annual Federal, state, and local taxes in one of the great states of the Middle West had reached the point where their sum is now equal to the assessed value of all property of every description in 44 of its 98 counties. And all of us know, I suppose, that the total of the Federal, state, and local debt is far in excess of the value of all the known resources of this country.

Thus, our future is heavily mortgaged and we face the greatest challenge of our national existence. Nothing short of the sum total of the finest talent in the land will be required to lick this problem.

So, I say that we must go on down from the Federal level to the state and local levels—to the very grass roots, if you please—if the great problems of our time are to be solved and the stability and security of our way of life are to be assured. It is clear, I think, that the state societies, as well as the Institute, have their work cut out for them.

These are accountants' problems as much as they are the problems of any other individuals or groups. They are the sort of problems which if not solved, spawn the confusion, frustration, and grave doubts in the minds of the people that lead ultimately to violent upheavals. They are the sort that give hope and boldness to those who would extend enslaving ideologies to all the rest of the world.

I am convinced by many years of intimate contact with government at all levels, both professionally and as a public official, that there is no more serious threat to the continuity of the way of life to which our government was dedicated by its founders than the inordinate height to which our public expenditures have mounted. I am equally convinced that this is a consequence of failure on our part to keep faith with these champions of the cause of freedom, a failure to realize that democracy and economic security are inseparable, that we cannot leave the preservation of democracy to the other fellow while we go after economic security, without losing both.

Some one has said that if we value anything more than we do freedom, we will lose our freedom, and, if it is money we are after, we will lose both. I hold, with all the conviction of my being, that no group of people in the country is better qualified than public accountants to take the lead in ridding the organization and management of our public affairs of the waste and extravagance that so surely threaten our freedom.

The tide is already running strong against the privilege of self-determination. Those who would uphold the sacred privilege of freedom must breast the wave together—NOW. Tomorrow may be too late!

EDUCATION FOR PUBLIC ACCOUNTANCY*

EMANUEL SAXE

WHEN Congress enacted the G. I. Bill of Rights, probably none of the members then envisaged the tremendous impetus to higher education which was provided by this law. A study recently made by Dean Partsch of Rutgers University indicates that by 1950, an estimated 6,000,000 students will have been enrolled for study at the college or university level.[1] Although this phenomenal enrollment is expected to recede to about 3,733,000 by 1960, nevertheless, that will still be twice as many students as were attending in 1940.

Recent indications disclose a rather considerable surge towards enrollment in education for business, with a substantial proportion of these students planning to major in accounting.[2] Nor did this trend in higher education toward preparation for an occupation or profession escape previous notice.

Thus, a nation-wide survey among 4,000 students in 41 colleges, conducted by the American College Publicity Association, indicated a 90% vote for a college course which would combine the teaching of how to live and how to make a living.[3] Benjamin Fine reported that in Minnesota, 2,500 freshmen said they wanted a good education to prepare them for leisure-time activities and for citizenship, but that they also equally wanted training for a job.[4]

In March of 1945, the American Council on Education reported on a study of the future educational plans of overseas fighting veterans, which was conducted by 14 officers in charge of education work for the Armed Forces. The consensus was that the men in uniform looked forward to the type of education that would prepare them for jobs.[5]

Shortly thereafter, the *Fortune* survey conducted in collaboration with the Committee on Post-War Training at Yale University, reported an almost unanimous desire for the importance of vocational training: 87% of the adult civilians polled in this survey felt that training to fit a person for a specific occupation or profession was an important purpose of college education for the individual concerned.[6]

The Hunter College student poll indicated that 500 selected residents of New York believed that the municipal college system (1) should prepare for a job—23%; (2) should furnish a cultural education—8%; (3) should do both—65%. (4) Only 4% had no opinion.[7]

An alumni committee of one of our great

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* Reprinted from the *New York Certified Public Accountant* of November, 1946.

[1] *The New York Sun* (Editorial), August 2, 1946.

[2] The "Report on Operations of the Board of Higher Education Units in the New York City Veterans' Service Center," submitted to the Board of Higher Education at its meeting of September 23, 1946, discloses the following data regarding fields of study preferred by the veterans interviewed at 500 Park Ave., N. Y. Service Center:

	10,000 Veterans to June 1	*2,459 Veterans June 1–Aug. 31*
Engineering	28%	25%
Business Administration	24%	24%
Liberal Arts	14%	20%
All other fields together	34%	31%
	100%	100%

See also, "Education for the Accounting Profession," by James W. DeVault. *The New York Certified Public Accountant*, August, 1945, p. 413.

[3] *The New York Times* (Editorial), February 12, 1945.

[4] *Democratic Education*, by Benjamin Fine. New York: Thomas Y. Crowell Co., 1945, Pages 178–9.

[5] *The New York Sun*, March 10, 1945.

[6] *Fortune*, April, 1945; *New York Herald Tribune*, April 5, and 12, 1945.

[7] *The New York Sun*, July 28, 1945.

liberal arts colleges, in studying its post-war function, reported that in order to prepare a student for mature participation in the society in which he lives, it was both conceivable and desirable that some vocational motivation be introduced, especially in the last two years.[8]

These are clear indications from all ages and walks of life of a popular and democratic demand for the kind of college education that will combine cultural and technical training. Indeed, one of our leading educators observed that there must be no dichotomy between the technical and the cultural, for the reason that neither has meaning without the other. A truly liberal education, Dr. Klapper said, is a balanced education which helps us to conceive the idea of a free life and gives us the power to attain it.[9]

The modern collegiate school of business is in a unique position to meet the requirements of this need, for it is so constituted as to maintain the proper balance between the liberal arts tradition and the specific requirements of preparation for a professional career in any of the various phases of business activity.[10]

In terms of types of curriculum structure for such a school, I would favor the "diagonal" plan, as recently described by Professor Boyd,[11] wherein the student begins his studies with a program containing a preponderance of subjects in the liberal arts division and a sprinkling of business subjects. As he continues through his collegiate career the trend is reversed so that, in his senior year, the student is pursuing a heavy concentration in his specialization group together with a light general elective program.

The general advantages of this plan are (1) the problem of articulation between high school and college is thereby minimized; (2) the student is introduced to business in broad terms through a general survey of business structure, organization, procedures, and laws—all of which are basically related to the accounting process;[12] (3) the general business subjects are appropriately introduced before specialization is begun; and (4) the choice of a specialty is deferred until such a time as the student has surveyed generally the various fields of business endeavor.

From the specific viewpoint of education for public accountancy, tbis form of curriculum design (i.e., the "diagonal" type) permits the accountancy student to defer his decision to prepare for this particular phase of the field until he has virtually completed his specialization group and has been "exposed" to the various areas of possible professional interest in the general field of accountancy.

I turn now to the expression of these general ideas in terms of specific curricular aims and objectives:

Part 1 of the tabulation which follows

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[8] *Amherst Tomorrow*, A Report of the Alumni Committee on Post-War Amherst College; *Amherst Alumni Council News*, February, 1945, page 52.

See, also, the observations of Dr. Ordway Tead on the subject of curriculum in his *Annual Report*, as Chairman of the Board of Higher Education of the City of New York, for the year ended June 30, 1945: "New Opportunities on Our City Campus (1944–45)," page 23. Likewise, his "Bridging the Gulf Between Liberal and Vocational Education," *Bulletin No. 5, Board of Higher Education of the City of New York*, November 22, 1945.

[9] Paul Klapper, in his *Centenary Address* entitled, "Education: A Transition," in the series on "Moral and Spiritual Foundations for the World of Tomorrow," delivered at Temple Emanu-El, New York, N. Y., January 28, 1945.

[10] In "The Question of Staff Training," THE ACCOUNTING REVIEW, January, 1946, Raymond G. Ankers, Personnel Manager of Lybrand, Ross Bros. and Montgomery, said that, ". . . at the outset of World War II and thenceforth on, most of the public accounting firms seek only graduates of schools of commerce who have completed a four year course of study including both cultural and technical subjects."

[11] "A Suggested Program for College Training in Accountancy," by Ralph I. Boyd, THE ACCOUNTING REVIEW, January, 1946. See, also, "College Training for Industrial Accounting," by Stanley A. Pressler, *N.A.C.A. Bulletin*, July 1, 1946.

[12] "Education for Public Accounting on the Collegiate Level," by Hiram T. Scovill, THE ACCOUNTING REVIEW, July, 1946.

states those aims which pertain to the development, disciplining and harmonizing of the student's general interests, a vital part of the curriculum since all professional training must be based on a broad, liberal education. Nor am I concerned with the expression of these objectives in terms of specific course offerings or their measurement in terms of either semester hours or college credits. That will follow naturally and easily once these aims and objectives are recognized as valid. But I am concerned that, irrespective of whatever is evolved in this connection, the development and administration be along the lines of the broad divisional groupings that will be indicated, rather than within the narrow confines of the compartmentalized structure of the traditional department.[13] Approximately one-half of the curriculum should be apportioned to the area considered in Part 1.

Part 2 deals with the objectives of the offerings denominated general business education, to which I would allot one-fourth of the total program of study.

Part 3 states the aims and objectives of the specialized training that I would require of all candidates preparing for careers in public accounting. In my opinion, approximately one-fourth of the total offerings should also be required under this heading.[14]

[13] "The high degree of departmentalization of curricular accounts for the large areas of darkness to which many students seem destined today. This specialization of knowledge results in highly segregated subjects presented to the student as the mature scholars organize their content. The young student lives an intellectual day that consists of seemingly unrelated activities. He goes from history to mathematics, from mathematics to English, from English to political science, from political science to physics, and so on to other water-tight compartments of knowledge. His school or college day does not possess the unity of life as he sees it and lives it."—Paul Klapper, "Education: A Transition," *supra.*

[14] Professor Boyd would also require 25%—"A Suggested Program for College Training in Accountancy," *supra;* while Dean Scovill would prescribe 27% in this connection—"Education for Public Accounting on the Collegiate Level," *supra.*

PROPOSED OBJECTIVES of a COLLEGE CURRICULUM FOR THE TRAINING OF PUBLIC ACCOUNTANTS

PART 1: SPECIFIC AIMS OF THE BASIC CULTURAL EDUCATION[15]

"That man has had a liberal education who has been so trained in youth that his body is the ready servant of his will; whose intellect is like a clear, cold, logic engine, ready to be turned to any kind of work and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature; one who is full of life and fire but whose passions are trained to come to heel by a vigorous will; who has learned to love all beauty, to hate all vileness, and to respect others as himself."

THOMAS HUXLEY

"The process of education is essentially a mode of mental living that prepares us to meet change with courage and understanding."

PAUL KLAPPER

"I fight . . . because I have a mind, a mind which has been trained in a free school to accept or to reject, to ponder and to weigh—a mind which knows the flowing stream of thought, not the stagnant swamp of blind obedience; a mind schooled to think for itself, to be curious, skeptical, to analyze, to formulate and to express its opinions; a mind capable of digesting the intellectual food it receives from a free press—because if a mind does not think it is the brain of a slave."

CORPORAL JACK J. ZUROFSKY

I. THE BASIC TOOL OF KNOWLEDGE AND COMMUNICATION:

(*Language*)

The student must be adequately trained in effective methods of communication.

1. Knowledge and command of correct patterns of speech, voice and gesture; of proper syntax, rhetoric and usage; and of a comprehensive, expressive and forceful vocabulary.

[15] Not everyone will necessarily accept the five major classifications into which I have divided the field of the student's general education. Nor do these indicated groupings yield mutually exclusive categories; there is admittedly some overlapping. Furthermore, the tabulation of aims and objectives within each group is intended to be suggestive rather than complete and conclusive.

2. Skill in the effective, accurate and logical organization and arrangement of thoughts and ideas.

3. Ability to speak clearly, continuously, pleasantly, and effectively.

4. Ability to write letters, reports, etc., accurately, logically, interestingly, effectively and with originality and facility of expression.

5. Knowledge of modern foreign language to an extent sufficient to maintain basic communication in it.

NOTE: Art and Music are, of course, also considered to be means of communication. I have preferred to include them under Part II.

II. MAN AS AN INDIVIDUAL:

(*Literature, Art and Music*)

The student must be adequately trained in esthetics and humanistics as the foundation for an intelligent and satisfying mode of individual life.

1. Knowledge of the great literature of our language and culture; also, of comparative literature, based upon knowledge of other languages and their literatures.

2. Understanding of art and music sufficient to provide the basis for their appreciation and enjoyment, as well as for skill in performance.

3. Development of attitudes and habits basic to all appreciation and enjoyment.

4. Appreciation of the values inherent in recorded human thoughts and ideals.

III. MAN IN RELATION TO HIS SOCIAL WORLD:

(*The Social Studies*)

The student must be adequately trained for intelligent and harmonious participation in group activities and relationships.

1. Knowledge and understanding of the nature of our social order; of the existence of problems therein and of the basis and nature thereof; of the importance of their solution, and of the responsibility of the individual and the group for their solution.

2. Understanding of the nature, operation and historical development of our economic, social, legal, political and educational institutions.

3. Knowledge of the duties, obligations and responsibilities of the alert and intelligent citizen.

4. Development of an individual attitude towards a comprehensive outlook in life.

5. Appreciation of moral values and their application to modes of conduct.

6. Understanding of the factors of human nature, behavior and experience affecting the individual as a personality and as a member of a social group.

7. Knowledge of the importance of collecting data; ability to subject data to appropriate statistical procedures, to interpret data and to make valid judgments based thereon.

IV. MAN IN RELATION TO HIS PHYSICAL WORLD:

(*Science and Mathematics*)

The student must be adequately trained in the scheme of nature and Man's place therein; in the habit of critical, disciplined observation and thought—the scientific method.

1. Recognition of the need for and the classification of scientific knowledge.

2. Knowledge and understanding of the evolution, growth, structure and function of living things; of the effect of chemistry upon our life and civilization; of the nature and operation of the physical universe; of the effect of earth phenomena upon modern civilization and politics.

3. Acquisition of the techniques, methods and theories basic to such knowledge and understanding.

4. Knowledge of the extent to which mathematics is basic to our existence and progress; of the extent of mathematical knowledge, theories and hypotheses. Skill in making absolute or approximate computations.

5. Development of the habit of critical, consecutive, disciplined thought based on tested fact.

V. MAN IN RELATION TO HIS PHYSICAL AND MENTAL STABILITY:

(*Health, Recreation and Guidance*)

The student must be adequately trained in the development of wholesome physical habits and ideals, and of desirable mental attitudes.

1. Knowledge of what is good health, proper organic growth and development; of relationship of efficient functioning to good health.
2. Acquisition of wholesome, permanent, constructive health, nutrition and recreational habits necessary to maintain individual and community health.
3. Development of traits of student leadership through participation in group activities.
4. Knowledge and understanding of the nature, emergence, structure, growth and development of the adult personality; and of the importance of proper and effective personality characteristics and social skills in business, civic, and social life.
5. Knowledge and understanding of the nature and importance of the ethical and spiritual values in all life.
6. Knowledge and understanding of professional and vocational requirements and opportunities and of desirable aptitudes basic to the various fields of work.

"Liberal materials and purposes do not end abruptly where the vocation or profession begins."

J. Hugh Jackson

Part 2: Specific Aims of General Business Education

"Business education should attempt to define the public interest, to describe going operations, to impart a clear sense of the several functional responsibilities necessary to the conduct of economic life, to appraise the contemporary operation of these functions critically and to think creatively about their improvement."

Ordway Tead

I. Internal Business Relationships:

The student must be adequately trained to know and understand the internal affairs of a business organization.

A. *From the Viewpoint of Function:*

1. Knowledge and understanding of purchasing, materials control, and production methods and administration.
2. Knowledge and understanding of the function and scope of the enterprise's markets, wholesale and/or retail, as well as of the administration of the related functional divisions.
3. Knowledge and understanding of the business's sources of financial supply and their operation, as well as of the administration of its investments, credits and collections, and finances.
4. Knowledge, understanding and appreciation of the inter-relationship of the foregoing, the risks and risk-bearing connected therewith, the personnel and public relations problems inherent therein, and the information and reports required for proper administration, management, and operation thereof.

B. *From the Viewpoint of Structure* (Levels of management):

1. Knowledge, understanding, techniques and skills basic to the ability to determine broad governing policies. (Administration).
2. Knowledge, understanding, techniques and skills basic to the ability to determine operating policies and control operations. (Management.)
3. Knowledge, understanding, techniques and skills basic to the ability to carry out operating policies. (Operation.)

II. External Business Relationships:

The student must be adequately trained to know and understand the external relationships of a business organization.

1. Knowledge and understanding of the growth, development, and evolution of American economic life and institutions.
2. Knowledge and recognition of the influence and importance of factors of geographic environment, both domestic and foreign.
3. Appreciation of the effect of business law and customs, upon the validity of transactions, together with relevant financial implications.
4. Knowledge and understanding of the political, financing, purchasing, marketing and other factors peculiar to foreign trade.

III. METHODS OF MEASURING, INTERPRETING AND CONTROLLING BUSINESS ACTIVITY:

The student must be adequately trained to know and understand the basic methods of measuring, interpreting and controlling all business activities.

1. Knowledge and understanding of the basic principles, methods and techniques involved in collecting, compiling, tabulating, treating, presenting and interpreting statistical data.
2. Knowledge and understanding of the basic principles, methods and techniques involved in the preparation of financial reports and statements, their analysis and interpretation, and the measurement of accomplishment reported as disclosed by their comparison with budgeted forecasts and predetermined standards of performance.

PART 3: SPECIFIC AIMS OF THE SPECIALIZED TRAINING FOR PUBLIC ACCOUNTANCY

"... the employing accountant of today expects men to have a technical background, a sound training in accounting and related subjects."

AMERICAN INSTITUTE OF ACCOUNTANTS

I. ACCOUNTNG THEORY AND PRACTICE:

The student must be adequately trained to know, understand and apply the principles of accounting theory and practice.

1. Knowledge and understanding of the principles of account keeping.
2. Ability to apply these principles to the recording of business transactions at all levels of complexity for all forms of business organization, and to the reporting of the results.
3. Recognition of the need for consistency in the application of these principles to all events occurring within a reporting period, as well as to those of successive periods.

II. CONSTRUCTIVE ACCOUNTING:

The student must be adequately trained to know, understand and apply the principles involved in the design, construction, installation and revision of an accounting system.

1. Knowledge and appreciation of the function of the accounting system as a part of the entire process of accounting.
2. Knowledge and understanding of the principles and procedures basic to the design, construction, installation and revision of an accounting system.
3. Knowledge and understanding of the function and use of mechanical devices and methods in this connection.
4. Skill and ability to apply this knowledge and understanding to specific situations.
5. Appreciation of the importance of the accounting system as a basic element in the conduct of an audit.

III. ANALYTICAL ACCOUNTING:

The student must be adequately trained to know, understand and apply the principles and practices of financial statement analysis, cost accounting and budgeting.

1. Appreciation of the value of and need for acceptable principles and techniques of accounting statement analysis.
2. Knowledge of existing methods of financial statement analysis.
3. Understanding of the extent of their statistical validity, as well as of any limitations upon their proper use.
4. Skill in the reporting and interpretation of the results of such analysis, including the meaning of the data presented in the financial statements; the significance of the balances, proportions, trends and tendencies disclosed therein; the nature and extent of any departures from predetermined forecasts and standards; etc.
5. Recognition of the importance of cost accounting and budgeting in relation to and as a means of furthering and extending accounting analysis and control.
6. Knowledge and understanding of the principles and procedures basic to the methodology of cost accounting and budgeting.
7. Ability to apply them to all functions (production, distribution, financing and administration) of all forms of business organization (manufacturing continuously or to order, trading, etc.).
8. Knowledge and understanding of the use of cost accounting and budgeting procedures as a means of standardization and control.

9. Skill in the reporting and interpretation of the cost and budgetary data.

IV. AUDITING:

The student must be adequately trained to know, understand and apply the principles, practices and standards involved in auditing and reporting.

1. Recognition of the need for and the use of the results of the auditing process as an element of business operation, management and administration.

2. Understanding of the purposes, advantages and limitations of the various types of audit.

3. Knowledge and appreciation of the various professional and ethical responsibilities and legal liabilities which accompany and/or grow out of the work of the auditor.

4. Knowledge and recognition of the nature and statistical validity of the testing (sampling) methodology in general, and in the conduct of an audit, in particular.

5. Understanding of the effect of the existing system of internal check and control upon the correctness and integrity of the accounts maintained thereunder.

6. Knowledge and understanding of, and skill in the application, performance and use of the accepted auditing processes, techniques and standards, leading to the development of all types of auditing evidence.

7. Understanding of the nature and probative value of all types of auditing evidence, whether derived from external or internal sources.

8. Knowledge of and skill in the methods of determining the degree of credibility to be accorded such auditing evidence.

9. Knowledge of the standards of business law, procedures and conduct against which auditing evidence must be tested to determine the validity of transactions, together with any relevant financial implications.

10. Skill in the techniques of recording, classifying, collating and filing auditing evidence in the working paper file.

11. Recognition of the need for and skill in the development of the means of planning, controlling and reviewing an audit engagement.

12. Appreciation of the importance of the qualities of integrity and independence in connection with the presentation of the auditor's findings.

13. Skill in reporting upon the results of an audit engagement, whether orally or in writing.

14. Understanding of the organizational structure and functioning of the office of the independent public accountant.

NOTE: A complete and thorough knowledge of the principles and practices of accounting, as hereinabove discussed, is presupposed before instruction in auditing is begun.

V. TAXATION:

The student must be adequately trained to prepare required tax reports in accordance with accepted accounting principles and governing legal precepts.

1. Appreciation of the nature and importance of the function of taxation (federal, state and local) in our economy.

2. Knowledge and understanding of various tax laws, regulations, rulings, decisions and discussions, basic to the proper preparation of the various tax reports required to be filed by clients with the various taxing authorities.

3. Ability to recognize situations that may involve or be complicated by the present tax problems.

4. Knowledge, skill and ability involved in the preparation of the various tax returns and the determination of the tax liability shown to be due thereon.

5. Skill in the preparation and filing of all working papers necessary to support each such tax return.

6. Knowledge, skill and ability involved in sustaining the correctness of a tax report upon a subsequent review thereof.

VI. SPECIALIZED FORMS OF ACCOUNTING:

The student should be adequately trained in a few forms of specialized accounting.

1. Knowledge and appreciation of the specific

nature of the organizational structure and mode of operation of the particular form of business enterprise or entity involved.

2. Knowledge of all laws and customs which may exercise an influence or regulating effect upon the business enterprise or entity.

3. Knowledge and understanding of the specific accounting system, procedures, reports, etc., required by the administrative management of such business enterprise or entity.

NOTE: It is my opinion that no attempt should be made to include instruction in more than a few forms of specialized accounting (of which Governmental Accounting, Fiduciary Accounting, and Stock Brokerage Accounting are examples) in the program of study of any particular student. Any such offering should be scheduled as a terminal course.

VII. UNDERGRADUATE ACCOUNTING INTERNSHIP:

The student should, if possible and feasible, receive some supervised contact with actual public accounting practice.

1. Organization of the knowledge, understanding, attitudes and skills produced by actual contact with auditing work in real situations.

2. Knowledge and appreciation of the problems, task, methods and techniques encountered and employed by public accountants in active practice.

3. Knowledge of the organizational structure and functioning of the public accountant's office.

4. Enlarged understanding and appreciation of the theoretical aspects of the student's studies necessarily arising from the foregoing.

NOTE: It is to be observed at the outset that this form of educatonal experience needs the most careful planning and the closest supervision, lest it develop into a sheer waste of time for all concerned. The advance planning should carefully delimit the precise area and level of the field of experience which it is desirable for the student to explore during his internship, as well as specify the time allocations involved therein. The supervision should be carried out by an instructor possessing a sufficiently balanced background of theory and practice to enable him to guide, evaluate and improve the results in any individual case. The entire program must, of course, be carefully integrated with the other instructional work.

Although the curriculum is a very important element in the educational process, it is by no means the only one. Proper planning for higher education in public accountancy involves consideration of at least three other factors which I shall touch on but very briefly herein. They are: the selection of students, the qualifications of the professional faculty, and the materials of instruction and teaching methods.

Because of the relatively greater success achieved by independent practitioners of public accounting during recent years[16] and more particularly during the war period, and further, because of the exceptional "transferability" inherent in competence and achievement in this field, an abnormally large rise in enrollment for accountancy study has developed. It is sincerely to be hoped that the studies on student selection presently in progress under the aegis of the American Institute of Accountants will help to solve this problem by eliminating unqualified students from this course of study as early in their careers as is consistent with accurate forecasting.

It is my opinion that the successful college teacher of accounting must be more than a competent professional specialist constantly in contact with the theory and practice in his field. He must have common cultural bonds with other educated persons. He must also possess the rare ability to teach, and thus facilitate the student's absorption of information, knowledge, principles and relationships as well as his acquisition of skills, attitudes, interests and ideals. He must be sufficiently alert and stimulating to pace the bright student, as well as patient and understanding enough to encourage the stragglers. That is not an easy order to fill these days, particularly in the light of the attractive offers which such men are known to receive from other sources.

Lastly, I cannot resist the temptation to express just a few thoughts upon a phase of the subject which, strangely enough, is rarely commented upon in this connection. I refer to the materials of instruction and methods of teaching. I venture to say while most accounting texts at the college level are sound enough from the viewpoint of accuracy of content and adequacy of

[16] *Income from Independent Professional Practice*. by Milton Friedman and Simon Kuznets, New York: National Bureau of Economic Research, 1945. See review in *The New York Certified Public Accountant*, April, 1946, page 205.

coverage, many of them would not meet the rigid standards of pedagogical excellence prescribed for textbooks at the lower educational levels. Too often, indeed, is the subject "thrown at" a college student-reader for him to puzzle out the connective tissue of unstated reasoning! Too rarely does one find the planned use of teaching methods and devices at the college level.[17] For example, we have lagged woefully in the use of modern audio-visual methods and aids as a means of presenting to the student the nearest thing to actual experience with realities.

The college teachers of accounting are on a threshold of an era that offers them the greatest challenge since the beginnings of our profession. Let us hope that our thinking, our planning and our actions are all equal to the opportunity that now confronts us!

[17] I wonder how many college teachers of accounting are familiar with such a book as *College Teaching (Its Rationale)* by Theodore H. Eaton. New York: John Wiley & Sons, Inc., 1932. Or, *The Training of College Teachers,*—William S. Gray, Editor, Vol. II of The Proceedings of The Institute for Administrative Officers of Higher Education. The University of Chicago Press, Chicago, 1930.

WHAT'S WRONG WITH OUR TEXTBOOKS?

L. Gluick

For over a generation Montgomery's *Auditing* has been properly known as the "Auditor's Bible." The modern user thereof is not aware of its genesis. Originally it was a translation of Dicksee's *Auditing*. "Translation" is used advisedly. British currency and terminology had to be made understandable to American readers.

This instance is cited to illustrate the dearth of accounting literature that existed in the United States fifty years ago, when our profession first gained recognition as such. The American practitioner was dependent on importations, or was obliged to write his own books. Some of our best early works were the expansion of staff instructions and manuals.

All that has long since been, not merely corrected, but overadjusted. We have had a flood, of Johnstown proportion, of accounting literature. Raising of paper restrictions should bring a new spate of "revised and enlarged" editions, and some entirely new works. That is as it should be. However, some of our current textbooks leave much to be desired; a few should never have been printed. Nearly all textbooks intended for students, as distinguished from reference books for practitioners, need revision. The writer, both as practitioner and as teacher, offers herewith his suggestions to authors and publishers. As practitioner, he desires to employ juniors who do not have their heads in a cloud of theory. As teacher, he desires to avoid the strain on his larynx and nerves required to tell the students the practical application, if any, of some of the material contained in the texts.

The corporation should be somewhat de-emphasized. The great bulk of business in the United States is done by corporations; the great majority of businesses are not incorporated. It is futile to teach students all the intricacies of finance of large corporations, and then have them graduate into a practice of sole proprietors and family partnerships. The excess profits tax drove out many small corporations;

its repeal has not brought back all of them. Statistics recently released showed that a very small number of accounting firms were doing more than 90 per cent of all the work reaching the SEC. Why train students for work which not one-tenth of one per cent of them will ever get, even as staff employees of the big firms?

The writer could give several cogent reasons why this condition exists, and adduce much evidence to prove the reasoning. Little would be gained thereby. The condition exists and needs correction.

Emphasize the problems of the small businessman: the merchant who keeps the corner grocery, the neighborhood variety store, or the village general store. He has problems of taxation, finance, and internal check which differ considerably from those of the big, incorporated merchants. These small men need education in such things. The ordinary novice in the profession is unable to give it. Too many, asked to audit an existing set of records, antagonize the client against *all* accountants, because:

(1) they find unfamiliar situations they cannot cope with,
(2) they immediately start to sell the installation of a new system.

That better methods are needed is indisputable. But only in rare cases should the old method, however crude, be scrapped in its entirety. The accountant should thoroughly familiarize himself with the little man's needs, desires, and methods. Then, and only then, should he attempt to change systems; and he should retain as much of the old as possible, building new flesh on the old skeleton. Has anyone ever seen a textbook which told how this is done?

There exists quite a lot of literature on business methods for the small merchant. Some of it is good. All of it gives small recognition to good bookkeeping, and the chapters thereon are rarely written by professional accountants. This is just a bonanza for the slick, high-pressure artist, who sells patented systems, which, if you believe the ballyhoo, keep themselves. As any CPA can testify, they all have some merit: but they all call for plenty of pencil-pushing or ink-slinging. They "keep themselves" just about as well as the "painless(?)" dentist who "guarantees(?)" against "lower plate wobble" succeeds in eliminating both pain and wobble.

What this country needs in addition to a good five cent cigar is an accounting text written by a country boy, whose biggest city experience was at the state university, and who is practicing in a town of not over 10,000 population. That book, if ever produced, would then become compulsory reading for all big city authors, who either have forgotten, or never had, experience with small merchants.

Please note: The writer has no objection to big business or to books dealing therewith. He merely desires that its disproportionate place in accounting texts be adjusted.

Textbooks should all be published in loose-leaf format. Thereby they may readily be kept up to date. Many publishers gloss over income tax problems; others omit all taxation, because tax laws change so frequently that the book is too clearly dated. To bring out a new edition involves a lot of work and expense. Changing a page or a chapter is simple and cheap. Of course, the initial cost of publishing will be slightly increased; metal ring binders seem to cost more than permanent binding. Also, the publishers would have to insert, on all title pages, the street and number where they do business, so that the purchaser could order new material as it appears.

Even the most elementary texts should stress taxation. Authors should take the utmost pains to stress the difference between good accounting and income tax accounting, and the means of keeping

books to conform to both. The chapters on Social Security, and Withholding of Income Taxes, should appear in the front of the book, immediately followed by a chapter on Sales Taxes. The loose-leaf system would permit the omission of the last from books shipped to those happy states like New Jersey and Texas which are free from the inequities of sales taxes. The loose-leaf system would also permit separate chapters, each written by a local expert, on the peculiarities of the tax system of each state specifically applied to the small proprietor or partnership.

Schools of accounting should not engage instructors who are not in *active* practice. The best schools never have permitted men to teach what they did not practice. Particular care should be taken to insure that instructors of the first three semesters, even though engaged in active practice, include in their clientele a number of small businessmen. Thus they can ecture on practical matters in terms their pupils will comprehend.

This brings up a question. What is a "small" business? Obviously "small" and "big" are relative terms. But we should avoid incidents such as the writer witnessed a few years ago. A speaker at a CPA meeting said, "A relatively small business; sales under five million." Ninety per cent of the audience gasped. The chances are that the aggregate sales of all their clients (the 90 per cent, that is) would not have exceeded that amount. Yet the speaker was not facetious. To his international firm $5,000,000 *was* "relatively small." The writer's definition of a small business is one with sales not over $100,000 and invested capital not over $40,000. But remember, "small" and "big" are still relative.

We need accountants trained to give informed and intelligent aid to small business. To obtain such accountants we must first have appropriate textbooks. Let's get them.

DEFERRED MAINTENANCE AND IMPROPER DEPRECIATION PROCEDURES

Carl T. Devine

During the wartime years and now during the reconversion period a number of arguments have been advanced that seem strange to accountants and to businessmen. Like the unicorn, deferred maintenance is sometimes said to exist only in the minds of highly imaginative individuals—individuals, it might be added, who are acutely motivated by a profit incentive. While the conclusion stated in this bald fashion without qualification is obviously extreme, businessmen have found themselves hard pressed to find convincing arguments.

It is the purpose of this paper to examine the conditions necessary for the existence of deferred maintenance, to investigate the propriety of taking a deduction from income to cover this item in advance of the actual expenditure, and to offer criticisms of some prevailing methods of measuring such deductions. In the course of this work it is necessary to review the relationship of maintenance to methods of depreciation apportionment.

From the economic viewpoint, the accountant by making periodic reductions of income for depreciation is attempting,

perhaps crudely, to provide for capital consumption or utilization. While there are businessmen who defend retirement methods of accounting for fixed-asset utilization, the typical accountant prefers and insists on more elaborate methods of periodic assignment. Two preliminary problems of importance at once arise. First, what rational basis for judging the merits of various depreciation procedures can be found? Second, what is the relationship of irregular maintenance expenditures to the depreciation method that has been adopted?

Accountants usually accept without serious objection the benefit theory of periodic asset assignment. In brief, this method assigns costs according to relative benefits received and expected, and if there are benefits to be received after the statement date, there is a prima facie case for considering a part of the cost as a legitimate asset. This guide or principle has been generally satisfactory, but there are cases in which its application leads to absurd results. A few examples may prove interesting.

It is widely agreed that the loss or gain on asset exchanges should be recognized in the period of disposal, but little sanction for this treatment can be found in the benefit theory. Professor Saliers and others have argued that the undepreciated balance should be added to the cost of the asset acquired.[1] It seems obvious that future periods should benefit from the use of the more efficient asset, and it seems to follow that these future periods should bear the obsolescence on the inefficient one. Critics have argued that each generation of physical facilities should bear the cost of such facilities. This argument is a less application of the benefit theory, and it has an undesirable implication of piecemeal liquidation. At best, the conflict, when only these arguments are used, is a stalemate.

The controversy over the treatment of unamortized bond discount when an issue is refunded is subject to similar difficulties. The Committee on Accounting Procedure of the American Institute of Accountants states the conflict as follows:

> The accounting rules, the applicability and interpretation of which are subjects of argument are: a. The rule that a loss or expense should be written off not later than the time when the series of transactions giving rise to it is completed; b. The rule that when a cost is incurred the benefits of which may reasonably be expected to be realized over a period in the future, it should be charged against income over such period rather than against income of the period in which the amount is paid or ascertained. . . . As the emphasis has shifted from the balance-sheet to the income account, the tendency has been to bring more and more transactions within the second rule.[2]

The Committee apparently would defend the continuing-transaction approach of Professor Saliers, but what should be its attitude toward deferred maintenance?

Practically all experts agree that certain types of deferred maintenance exist in a physical and financial sense.[3] The issue is whether or not income deductions should be made in advance of the expenditure. Strict application of the benefit theory leads to the conclusion that periods subsequent to (or the period of) the expenditure should be charged, and that no pre-expenditure deductions should be made. It is, of course, impossible to speak for the Committee, but it seems reasonable to suppose that it would at least condone, if not actively encourage, such accounting treatment. It is clear that advocates of advance charges for deferred maintenance can find no aggressive support from this quarter.

[1] Saliers, E. A., *Depreciation—Principles and Applications* (3d ed., New York, Ronald Press, 1939), p. 57.

[2] *Accounting Research Bulletin*, No. 2, pp. 14–15.

[3] Professor Sumner H. Slichter has estimated that deferred maintenance amounted to one billion dollars to the middle of 1943. "Postwar Boom or Collapse," *Harvard Business Review*, Autumn, 1942, p. 8.

Perhaps, with regard to depreciation and maintenance, the conflict of rules suggested by the Committee is not appropriate. In this case the rule with which the benefit doctrine conflicts is that which holds that income properly can be reported only after capital, in some accepted sense, is maintained.

For an illustration assume that an apartment hotel is painted by a full-time laborer whose wages are charged to expense. Inasmuch as the wage payments are regular, no accountant condemns their treatment as expenses of the periods in which they accrue. Suppose also that an individual room is painted each fourth year. Then at any point of time after the seasoning period has expired the rooms, on the average, are one-half "maintained." Suppose, further, that during the war and reconversion period no painting is done. Several alternatives may be open to the manager.

If competition is not intense, he may resume painting (maintenance) at the regular rate, and, at the end of four years, all rooms will be in their prewar condition except for normal depreciation. Has there been deferred maintenance in this case? A negative answer is not ridiculous. The fact is that the manager has no explicit painting cost for the restricted period. If rental rates do not fall, there is no impairment of earning power and no capital deterioration in a broad sense. If revenues do not fall, the sacrifice (cost) is borne by the tenants and other members of the society. Capital, except in a physical sense, has been maintained.[4]

Because of the pressure of competition the manager may find it necessary to paint all rooms as soon as materials and labor are available. Is deferred maintenance present in this case? Future periods will receive advantages from immediate renovation, and, according to the benefit doctrine, future periods should bear the cost. If immediate renovation is required, clearly the earning power, which was unimpaired during the restricted period, is not maintained. The accountant, operating under the rule which calls for maintenance of earning power, must reduce reported income to provide for maintenance that has been deferred.

The illustrations above relate to maintenance which may be postponed or may be omitted entirely. In some cases inadequate maintenance leads to unusually large upkeep expenditures in the future. The benefit rule permits no advance charges to income even though the earlier under-maintenance is directly responsible for extraordinary expenditures in the future. If a workman forgets to oil his machines, can anyone argue seriously that the repair bill should be capitalized? The truth is that the firm's over-all capital (in the economic sense) has been reduced. The benefit doctrine must be abandoned when such cases are given consideration.

The close relationship between depreciation and maintenance has been emphasized many times. A "normal" amount of maintenance would seem to be that amount which keeps the equipment and plant operating efficiently for the span of life anticipated when the depreciation rates were set, and from the profit point of view both should be set with the expectation of getting the lowest production costs at the levels of activity necessary to exploit consumer demand effectively. If there are

[4] In general there are four distinct meanings given to "capital" when it is used in discussions of income:
(1) Invested capital in dollars.
(2) Capital as physical assets, legal claims, and privileges.
(3) Capital as assets converted into current purchasing power.
(4) Capital as earning possibilities. Earning possibilities may be expressed in real or monetary units.
In the illustration capital has been maintained in the usages expressed in (1) and (4) above. When used as in (2) above, deterioration is evident. Some sort of index must be accepted and applied before it is possible to appraise capital maintenance as used in (3).

no obsolescence and similar factors, a policy of over-maintaining reduces the yearly depreciation charge, but if the calculations have been properly made, the decrease in annual depreciation, spoilage, and interest should be less than the increase in maintenance expenditures. In a similar way a policy of under-maintaining should result in increased periodic depreciation in excess of the amount saved on maintenance. Wartime shortages have had some interesting effects on maintenance policy. When the assets themselves could not be replaced and maintenance items were available (e.g., motor vehicles), wartime maintenance tended to exceed greatly the normal peacetime estimates, whereas depreciation charges, except for other possible considerations, were greatly reduced. If both maintenance and the purchase of new assets were curtailed, depreciation was often greatly accelerated on long-lived assets.

It should be clear that deferred maintenance, if deferred long enough and of the proper kind, can result in realized depreciation in excess of the amounts contemplated when the original rates were set. Depreciation may be accelerated. A question of income determination immediately arises: Should the periodic depreciation charges of future periods be changed to conform to the modified lives of the properties or should the entire amount of realized depreciation be charged to the operations which were responsible for the acceleration? From the standpoint of asset valuation and from the standpoint of fairness when government contracts were involved, it seems that the entire amount of realized depreciation should be charged to the periods in which the value decreased and to the individuals responsible for the decrease. When individuals are involved, the responsibility doctrine seems to be the most acceptable guide, especially when applied to direct costs. For periodic distribution the maintenance of capital doctrine seems appropriate.

If every expenditure is properly accounted for, there are many instances which do not support a substantial case for making deductions of income to cover deferred maintenance. But in the typical accounting routine numerous items that benefit future periods are taken to expense immediately. This convention is one of convenience, and during normal operations the periodic outlays are uniform enough to avoid serious "distortion" of the income stream. Although accountants may not be proud of the fact, it is true that almost all accounting systems treat many capital assets on the modified replacement basis. A street railway, for instance, treats the replacement or extension of a few miles of overhead lines as current expense. The cost of replacing less than five continuous miles of rails may be considered expense. An apartment house may replace its carpets piecemeal and treat each replacement as current expense. A trucking company may treat tire replacements as expense though the tires may benefit several future periods. Such cases are legion. The effect is similar to that resulting from the use of the retirement method of depreciation, but the effect is not obvious in ordinary times, and it is minor compared with some of the early accounting systems which used replacement and retirement methods for all depreciable assets.

There are two probable results of this type of accounting. First, the assets of the firm may be chronically understated. Services are still to be received from many small items whose costs have been taken to expense, and in aggregate the understatement on the balance sheet may be considerable. There are, of course, some fluctuations in reported income arising from the use of this method, particularly before the plant has become seasoned. After the seasoning process has developed

and as long as conditions are normal, this procedure when applied only to small items yields acceptable results.

During a period of restrictions the stream of replacements diminishes until only those items which are essential are replaced. During these periods revenues are often high, and it is easy to understand why businessmen wish to include a charge for deferred maintenance. They see the hidden fat of the enterprise being rapidly consumed. The wartime periods are getting the services from these facilities, and little or no cost is being charged against the inflated revenues. If the company is subject to excess-profit taxes or if it is operating on cost contracts for the government, secret reserves are being consumed without an opportunity for immediate replacement and without expected reimbursement. If book values include the original cost of some short-lived items which are being depreciated over long periods, businessmen may complain that such "values" cannot be justified without abnormal future expenditures.

In the first case it is true that prewar periods have been charged for some services that they did not receive, and it is also true that the reported capital has been consistently understated. But to insist that the war years should be charged with none of this deterioration of hidden capital has little basis in theory. Few accountants care to defend the thesis that profits should be overstated in certain periods to compensate for understated income reported in earlier years. Perhaps the most reasonable procedure is to reinstate the hidden assets or to decrease existing book values and depreciate them during the war and reconversion periods in lieu of reducing income for maintenance deferred.

The second probable result of improper asset accounting is almost the opposite. The original costs of minor items are sometimes included in the original cost of the entire depreciating unit. An automobile truck, for example, usually constitutes the depreciation unit. The cost of the original battery and other short-lived components are depreciated over the life of the vehicle. Replacement of minor items is usually charged to expense of the period in which replacement is made. Thus, the period of replacement is charged with the cost of the new element and with an appropriate amount of depreciation on the original installation.

After the plant has seasoned, the depreciating units are on the average one-half depreciated and the minor parts are approximately one-half worn out. The book value, therefore, is a fair index of services to be received. If replacement of parts is deferred, the book figures do not reflect the loss in benefits to be expected.[5] Clearly, some deduction should be made to provide for the relative overstatement of expectations. This deduction now appears as an increased depreciation charge. The usual charge is not sufficient in view of the abandonment of the replacement policy upon which the original depreciation rate was set.

The argument just presented attempts to show the relationship of deferred maintenance to depreciation. It has also been pointed out that few specialists dispute the existence of deferred maintenance in a financial or physical sense. It does not follow, however, that the amount of the deduction made in advance of the expenditure should equal the amount of such expenditure. A brief discussion of the usual methods of measuring deferred main-

[5] It is not meant to imply that book values should show the discounted services to be received. Yet accountants should not be satisfied with the offhand remark that book values represent only that part of original cost which the bookkeeper has not charged to operations. Assuming rational bookkeeping the book value of assets is obviously related to service expectations. At the time of purchase the value of expected services must have been greater than the explicit cost, and, unless the write-off is capricious, later book figures should represent a similar index of expectations.

tenance should illustrate this proposition.

From one viewpoint the proper amount of deferred maintenance is that amount (properly discounted) which, if spent when scarce factors are available, would bring the facilities back to their former condition except for the ravages of regular depreciation. This measure is based on the principle of capital maintenance and looks behind the bookkeeping methods of arbitrarily classifying revenue and capital expenditures. Suppose that after the cessation of hostilities a railroad is unsafe for competitive travel and the entire trackage must have new ballasting before operations can be carried on safely at the pace demanded by competition. If one million dollars is necessary to carry through this operation, it should be clear that the entire expenditure is not always necessary to validate the bock figures. Approximately $500,000 is a clear-cut addition to prewar capital values if typical depreciation methods have been followed. If ballasting has always been charged to expense, the entire amount may be capitalized. There is no reason to delay the installation of proper asset accounting.

In practice it is difficult to estimate the amount that must be expended to put the properties in their prewar condition. This estimate must be made in advance, and the task is complicated by the necessity for estimating future price levels, future labor efficiency, and other imponderables of this nature. Perhaps the best that can be done is to have department managers estimate the amounts that they think must be spent in their individual sectors and to collate these figures. Whenever possible, these estimates should be in terms of the things that must be done on a physical level. Dollar translations may be made in terms of either prewar costs or present costs, for in either case further adjustment will probably be needed to bring the estimates in line with the price and efficiency levels that are expected to prevail when the work is actually done.

Estimates of this sort are often little more than guesses, and the courts or regulatory bodies are not likely to give them serious weight without independent support. It is unfortunate that independent support must rest on estimates equally subject to error. Perhaps the best check on the estimate of the amount that will be necessary to put the facilities in their original condition is made by estimating the amounts that would have been spent during the lean years and modifying this estimate for changes in costs. This approach is treacherous, and there is little doubt that some objections to the concept of deferred maintenance itself are rooted in criticisms of this method of measurement.

The measurement of deferred maintenance by estimating the amounts that would have been spent during the restricted period must be approached with caution. First, a large number of costs that would have been incurred will never be made. Cleaning that was foregone may be written off as a social cost and must be excluded from the calculation. Only those costs which will ordinarily benefit more than one period and which either are charged, for convenience, to expense in the period of incurrence or improperly depreciated should be included. Even these costs must be examined carefully, for in some cases these items would have been replaced several times during the wartime period and would normally have been included in expense on each occasion. For example, overhead lines for a street railway ordinarily would have been replaced four times, but during the war years they actually may have been replaced only once. To include three such replacements in the measure of deferred costs is clearly to inflate the amount.

With the widespread increase in wage

rates and overtime the usual expenditure in dollar terms gets considerably less effort from the working staff. The labor factor usually needs adjustments in addition to those reflecting changes in wage rates and overtime. In many cases there was a serious decline in efficiency. This decline was due not only to the poorer quality of the working staff but also to the improvisation that was necessary to procure suitable materials. Shop or other records should be studied to discover roughly the loss in efficiency, and an index of this tendency is probably desirable.

Still a further labor adjustment may be necessary for upgrading. In many cases workers have been given higher ranking with higher wage rates although they were performing the same type of work. These three adjustments—wage and overtime, efficiency, and up-grading—may be combined to form a labor cost index, but the best that can be expected of such an index is that it will indicate the probable cost of performing the actual work.

Correction of material expenditures proceeds in a similar fashion. While it is usually impractical to follow price changes for all maintenance materials, it is often possible to construct a schedule of ten to fifty important items that make up 80 to 90 per cent of the total cost of such supplies. Materials are complicated also because of the inventory process and the resulting lag between purchase and requisition. The inventory of maintenance materials normally decreases during periods of restrictions, and when first-in, first-out is used materials actually used are often priced at or near prewar prices. This is clearly unfair from the standpoint of finding how much would have been spent for future work. Assuming that the prewar inventories were normal, they must be built up again at prices prevalent when items are available.

The fact that businessmen have been forced to use such cumbersome tools indicates the complexity of the practical problem. But for accountants there is a worse difficulty. The accountant is committed to the principle of original cost, and measuring the amount of funds necessary for replacement is not equivalent to measuring the capital deterioration in terms of original cost.

It is ironical that the accountant must rest his case for advance charges to cover deferred maintenance primarily on unsatisfactory depreciation procedures. The profession has become more and more cautious about using the word "principle" with its implication of immutable truth. Nevertheless, most accountants should agree that an understatement of past profits is not properly corrected by a compensating overstatement of income in future periods. Nor can the argument be advanced in rebuttal that at the end of the restricted period the statements, without benefit of deferred maintenance, may again be correct. It is also agreed that new procedures must be adopted when conditions which validated the old have changed.

EFFECT OF INVENTORY VALUATION METHODS ON PROFITS*

Robert W. King

Any company which sells merchandise to which it has a title ordinarily has inventories on hand at the beginning and end of each accounting period. The inventory on hand at the end of the period appears on the balance sheet as an asset, and is also taken into consideration in the income statement in determining cost of goods sold. It is immediately apparent, therefore, that the method of pricing the inventory at the beginning and end of each accounting period will have an important effect on both the balance sheet and the income statement. Stated in another way, if the method of pricing inventories allows an overstatement of the final inventory, then the asset value appearing on the balance sheet will be overstated. Similarly, the cost of goods sold on the income statement will be improperly stated, the amount depending upon the pricing errors in both the opening and closing inventories. It is a matter of extreme importance, therefore, that every company in which inventories play an important part should, in preparing its financial statements, follow a consistent and well-devised method of inventory pricing. Failure to do so will result in inaccurate and inconsistent financial statements, and will also result in inaccurate costing of goods sold during any accounting period.

METHODS OF INVENTORY VALUATION

Until a comparatively few years ago, most of us considered cost-or-market, whichever is the lower, coupled with first-in, first-out (or average cost per unit) as the usual method for inventory pricing. In using either of these methods, market prices are used if they are lower than cost, but not if they are higher. Thus unrealized losses are recognized in inventory pricing, but unrealized profits are not so recognized.

Although these methods are very satisfactory for the majority of cases, yet they have a few disadvantages which are not apparent when LIFO (last-in, first-out) is used. The argument is frequently advanced, for instance, that a minimum inventory is in reality a fixed asset. Assume for instance, the case of a manufacturing company in which the manufacturing process requires a time period of three years. Certainly this company must have on hand, at all times, a minimum inventory representing its manufacturing needs for a period of three years. For this reason, it might well be said that the three-year inventory represents a fixed asset which should be valued on the same basis as that used for fixed assets, with no recognition of current replacement values. If this type of valuation method is used, there must be coupled with it the assumption that the last goods purchased are the first goods sold. This means, in effect, that all sales are made out of current acquisitions. Stated in another way, under the LIFO method, current costs are matched against current revenues regardless of the prices that are assigned to the minimum inventory which, in the example referred to above, consists of a three-year supply of raw materials.

If the market on raw materials should remain steady over a period of time, the several methods would give exactly the same results. It would make no difference whether the inventories were priced at current replacement cost, or at the actual

* A paper for the Washington chapter of NACA.

or average cost of a prior year. If, on the other hand, the market should be gradually rising then, by the LIFO method, inventories would be priced at the cost of a prior year, which would be lower than current cost. This situation is illustrated in Appendix I, which compares inventory pricing by the LIFO method with the lower of cost or market, coupled with first-in, first-out (FIFO).

This table describes a hypothetical situation designed to show the method of pricing inventory changes, as well as to illustrate the effects of inventory pricing on profits. For an additional illustration, Appendix II is based on the financial effects of the use of LIFO in an actual case which was examined some months ago.

RELATIONSHIP TO THE INTERNAL REVENUE CODE

The inventory pricing method used by any company for its records must, for most purposes, agree with the method used for income tax purposes. This is primarily true because if a company uses LIFO for its income tax reports it must also use LIFO for the "records and accounts employed by the taxpayer in keeping his books" (*Regulations 111*, Sec. 29.22 (d)-2(8)). Also, at the time that it changes to the LIFO method it must certify to the Commissioner of Internal Revenue that at no time within the last previous year has it prepared a statement for "(i) shareholders, partners, or other proprietors or beneficiaries, or (ii) for credit purposes" on any basis other than LIFO (*Internal Revenue Code*, Section 22 (d) (2) (B)). We are then forced to examine rather carefully the requirements of the income tax laws with respect to inventory valuation.

Section 22(c) of the *Internal Revenue Code*, with respect to inventories, provides as follows:

> (c) Inventories—Whenever in the opinion of the Commissioner the use of inventories is necessary in order clearly to determine the income of any taxpayer, inventories shall be taken by such taxpayer upon such basis as the Commissioner, with the approval of the Secretary, may prescribe as conforming as nearly as may be to the best accounting practice in the trade or business and as most clearly reflecting the income.

This section of the law gives the Commissioner of Internal Revenue the right to pass upon the inventory pricing methods used by any particular taxpayer for income tax purposes, and other provisions of the law, as indicated above, practically make it mandatory, so far as LIFO is concerned, that the method used for computing taxes shall also be the method used for other purposes. It is because of these powers of the Commissioner of Internal Revenue that the tax laws must be carefully studied in connection with any discussion of inventory methods.

Section 22(d) of the *Internal Revenue Codes* provides for the elective use of the LIFO method of valuing inventories. In reading this section of the Code, it will be noted that the valuation method, when this section is used, is very closely circumscribed and that very few elections are left to the taxpayer after he obtains permission to use it.

If the LIFO method is used, and the inventory quantities at the end of the year total exactly the same as the inventory quantities at the beginning of the year, then the basis of pricing the final inventory will be the same as the basis for pricing the beginning inventory, regardless of any price changes which may have occurred during the year. If, however, the inventory quantities on hand at the end of the year are more than those on hand at the beginning of the year, the pricing of the excess must be based on the cost during the year in accordance with subsection (1) (B) of Section 22(d) of the Code. *Regulations 111*, Section 29.22(d)-2(4) defines various options for pricing this excess as follows:

> (a) By reference to the actual cost of the goods most recently purchased or produced;

(b) By reference to the actual cost of the goods purchased or produced during the taxable year in the order of acquisition;

(c) By application of an average unit cost equal to the aggregate cost of all of the goods purchased or produced throughout the taxable year divided by the total number of units so purchased or produced, the goods reflected in such inventory increase being considered for the purposes of Section 22(d) as having been acquired all at the same time; or

(d) Pursuant to any other proper method which in the opinion of the Commissioner clearly reflects income.

On the basis of that part of the *Internal Revenue Code* which is referred to, together with the extract from the *Regulations*, it can be seen that the increase in inventory during the year may be priced by any one of several different methods, but that in each case the method for pricing the excess must bear some relationship to the costs during the year. In Appendix I the average cost method has been used (subsection (c) above). In lieu of the average cost, the taxpayer could have used either the most recent purchases (subsection (a)), the purchases in order of acquisition (subsection (b)), or, in accordance with subsection (d), any other proper method, if approved by the Commissioner of Internal Revenue. The method of pricing inventory increases must be consistent from one year to another.

If the quantities on hand at the end of the year are less than those at the beginning of the year, the basis of pricing will depend upon the method used for pricing the inventory at the beginning of the year. If averages are used, then the inventory at the end of the year is priced on the basis of the average. But if the year during which the inventory quantities decreased followed a year in which they had increased, the prices to be assigned to the excess quantities would be in the order of their acquisition. As an example, if, during the fifth year in the example shown in Appendix I, quantities had decreased from 6,000 units (3,000 @ 10¢, 2,000 @ 20¢ and 1,000 @ 17¢) to 5,500 units, the 5,500 would be priced at a total of $785 (3,000 @ 10¢, 2,000 @ 20¢ and 500 @ 17¢).

If, at the end of the first year or at the end of any subsequent year, the inventory actually on hand should be less in total quantity than the inventory at the beginning of that year (the decrease being voluntary on the part of the company) and then it should increase during the following year, that increase would be priced on the basis of the quotation from the *Regulations* of the inventory when the LIFO method was originally established. (See "Involuntary Liquidation of Inventories," below for treatment when the decrease is involuntary.) Under the circumstances stated, if a company is on the LIFO basis and it voluntarily allows the inventory quantities to decrease, then subsequent replacement of this inventory will be at rates based on the market. (See 3rd year in Appendix I.) Thus, if the quantity of inventory after LIFO has been established should voluntarily vary, sometimes below and sometimes above the original inventory, it will be seen that, with the passage of time, the price at which the final inventory is valued will gradually change so that it will bear closer relationship to current prices. This situation is brought out in Appendix I, where it is noted that the original inventory was priced at ten cents per unit, but subsequent decreases and increases gradually increased the inventory price to an average of fourteen and one half cents per unit.

TREASURY DECISION 5407

Treasury Decision No. 5407 has the effect of amending Section 29.22(d)-1 of *Regulations 111*, so that the taxpayer may elect, in pricing his final inventory, to make the LIFO method apply only to the raw materials contained in the finished product.

Without the benefit of this Treasury decision, goods-in-process and finished-goods inventories representing costs for raw materials, processing, and overhead would be priced in total on the basis of LIFO, regardless of any changes in processing and overhead costs which may have occurred since the original establishment of LIFO. If, however, a taxpayer elects to price his inventory under Treasury Decision 5407, he may make the LIFO method apply only to the raw materials whether they are in a separate inventory or represented in inventories of goods in process and finished goods.

This method is illustrated, in Treasury Decision 5407, by the following example.

An opening inventory consists of 10 units of raw material, 10 units of goods in process, and 10 units of finished goods, the raw material cost being 6¢ per unit, the processing cost 2¢ a unit, and overhead cost 1¢ a unit. For the purpose of this example, it is assumed that the entire amount of goods in process was 50 per cent processed.

OPENING INVENTORY

	Raw Materials (10 units)	*Goods in Process (10 units)*	*Finished Goods (10 units)*
Raw materials (@6¢)	$0.60	$0.60	$0.60
Processing costs (@2¢)	—	.10	.20
Overhead (@1¢)	—	.05	.10
	$0.60	$0.75	$0.90

In the closing inventory there are 20 units of raw material, 6 units of goods in process, and 8 units of finished goods, and the costs were: raw material 10¢, processing cost, 4¢, and overhead, 1¢.

CLOSING INVENTORY, UNADJUSTED

	Raw Materials (20 units)	*Goods in Process (6 units)*	*Finished Goods (8 units)*
Raw materials (@10¢)	$2.00	$0.60	$0.80
Processing costs (@4¢)	—	.12	.32
Overhead (@1¢)	—	.03	.08
	$2.00	$0.75	$1.20

CLOSING INVENTORY, ADJUSTED

	Raw Materials (20 units)	*Goods in Process (6 units)*	*Finished Goods (8 units)*
Raw materials			
(30@6¢; other 4@10¢)			
20@6¢	$1.20		
6@6¢		$0.36	
4@6¢			$0.24
4@10¢*			.40
Process costs (@4¢)		.12	.32
Overhead (@1¢)		.03	.08
	$1.20	$0.51	$1.04

* This excess is subject to determination of price under Section 22(d)(1)(B) of the *Internal Revenue Code* and Section 29.22(d)-2 of *Regulations 111.*

If processing costs and overhead during a particular period are higher than those of the period immediately before LIFO was established, Treasury Decision 5407 allows a higher valuation of the closing inventory than if LIFO without Treasury Decision 5407 were used.

The LIFO method of inventory valuation is frequently compared with the "base-stock method." In the base-stock method, however, the emphasis is on the minimum amount of inventory required to carry on the business operations. In the LIFO method, on the other hand, the emphasis is on the matching of current costs against current revenues. In practical operation, the two methods are ordinarily considered as being synonymous although there may be a few minor differences in pricing inventories in years subsequent to the year in which the method is first established. For a short time prior to the Revenue Act of 1939, the LIFO method was allowed for tax purposes to tanners and to producers and processors of non-ferrous metals. The Revenue Act of 1939, however, extends the elective method to all taxpayers for taxable years beginning after December 31, 1938.

The base-stock method on the other hand, has never been recognized for income tax purposes.

ADMINISTRATIVE PROCEDURES

The procedural requirements incident to adoption and use of the LIFO method for tax purposes are outlined rather completely in Section 29.22(d)-2 of *Regulations 111*. This section of the Regulations describes eight requirements as follows:

(1) The taxpayer shall file an application to use such method specifying with particularity the goods to which it is to be applied.
(2) The inventory shall be taken at cost regardless of market values.
(3) The original inventory shall be on the average cost basis.[1]
(4) The basis for pricing increases in inventories at the end of accounting periods shall be described.[2]
(5) The Commissioner shall be satisfied that during the year immediately prior to the application, statements were not prepared for owners on any basis other than LIFO.[1]
(6) The income tax return for the year prior to the establishment of LIFO shall reflect inventory at cost as determined in Item 3 above.[1]
(7) The elective inventory method, once adopted by the taxpayer with the approval of the Commissioner, shall be adhered to in all subsequent taxable years unless—
    (a) A change to a different method is approved by the Commissioner; or
    (b) The Commissioner determines that the taxpayer, in ascertaining income, profit, or loss for the whole of any taxable year subsequent to his adoption of the elective inventory method, for credit purposes or for the purpose of reports to shareholders, partners, or other proprietors, or to beneficiaries, has used any inventory method at variance with that referred to in Section 29.22(d)-1 and requires of the taxpayer a change to a different method for such subsequent taxable year thereafter; and
(8) The records and accounts employed by the taxpayer in keeping his books shall be maintained in conformity with the inventory method referred to in Section 29.22(d)-1; and such supplemental and detailed inventory records shall be maintained as will enable the Commissioner readily to verify the taxpayer's inventory computation as well as his compliance with the several requirements.

[1] Paraphrased.
[2] See Section 29.22(d)-2(4) quoted previously.

The main effect of these eight subsections of Section 29.22(d)-2 of *Regulations 111* is that, once the decision to use the elective method has been made, all subsequent actions with respect to inventory pricing shall be taken in accordance with decisions of the Commissioner of Internal Revenue, and that a reversal of the original decision with respect to the use of the LIFO method is not possible unless: (1) The Commissioner approves an application for a return from LIFO, or (2) The Commissioner directs that LIFO shall no longer be used because the taxpayer has used an inventory method other than LIFO for non-tax purposes for the whole of any taxable period.

The *Internal Revenue Code* and the *Regulations*, as mentioned above, appear to be rather strict in prohibiting methods other than LIFO, when LIFO is adopted for tax purposes, either during the year before the adoption of LIFO or during the whole of years subsequent to such adoption. Item 7(b) of the above quotation, for instance, gives the Commissioner the right to direct the taxpayer to change from LIFO if he has published any financial statement on a non-LIFO basis for the whole of any year after the original adoption of LIFO.

INVOLUNTARY LIQUIDATION OF INVENTORIES

Section 22(d) (6) of the *Internal Revenue Code* provides that any inventory decreases which are involuntary, because of certain specified causes, may be the basis of a later tax adjustment. More specifically, this section of the Code, which is entitled "Involuntary Liquidation and Replacement of

Inventory," applies in cases in which the inventory reduction is due:

(i) To enemy capture of control of sources of limited foreign supply;
(ii) To shipping or other transportation shortages;
(iii) To material shortages resulting from priorities or allocations;
(iv) To labor shortages; or
(v) To other prevailing war conditions beyond the control of the taxpayer.

If any inventory reduction occurs which is due to any of the causes listed above, and if, within three years after the close of the war as proclaimed by the President, the inventory reduction is replaced, then the difference between the replacement cost and the original pricing would be reflected as an adjustment in the tax return for the year in which the liquidation occurs. If the eventual replacement cost is higher than the cost at which the goods were carried at the time of liquidation, then the excess would appear as a deduction in an emended income tax return for that year, but replacement at a lower cost would cause the difference to be reported as additional taxable income (Sec. 22(d) (6) (A) I.R.C.).

Reference to the second year in Appendix I will show the potential effect of this provision on costs. There is a partial liquidation of 1,000 units in the inventory which, for tax purposes, is absorbed at the LIFO price of 10¢ during the year of liquidation (Sec. 22(d) (1) I.R.C.). If, however, the liquidation was involuntary and the 1,000 units are later replaced in accordance with the limitations mentioned above, the tax return for the period of liquidation will be amended after replacement. By this means, in the final analysis, the costs are absorbed at actual replacement cost as soon as that cost is known, instead of at the LIFO price.

Some accountants, recognizing the fact that the inventory which is currently being liquidated will probably be replaced at a later date under Section 22(d) (6) of the *Internal Revenue Code*, may wish to recognize the potential eventual effect on costs at the time of liquidation, rather than wait until actual replacement. This is sometimes accomplished, so far as the cost and financial records are concerned, by charging costs at the current replacement rate of 16¢ per unit, crediting the excess of 6¢ over the LIFO price to an "Inventory Replacement Reserve." It should be recognized that the tax records and the cost records will be in disagreement if this procedure is used, and also that this method could be criticized since the 16¢ current replacement cost is being used as a mere estimate of the eventual replacement cost. On the other hand, the replacement-reserve method has the advantage, from the standpoint of LIFO accounting, of continuing to match the current replacement cost of 16¢ against current revenues, thus avoiding a book profit of $60 that would develop if costs were absorbed at the 10¢ LIFO price.

Let us examine the possible effect of these two different methods of cost absorption on financial statements. For the purpose of this example, we shall assume that the liquidation reflected in the second year of Appendix I was involuntary, in accordance with the Code section described above, and that its replacement occurred in the following year in the quantities and at the prices indicated for the third year of the example.

Absorbing costs at the LIFO price would require this entry:

Factory Costs		$1,380	
Inventories			$1,380
8,000 units @16¢	$1,280		
1,000 units @10¢	100		
Total, second year	$1,380		

Replacement and use would be reflected by these entries:

Inventories	$2,400	
Accounts Payable		$2,400
12,000 units @20¢		

Factory Costs (or surplus)		$ 100	
Factory Costs		2,000	
Inventories			$2,100
1,000 replaced @10¢ excess cost	$ 100		
10,000 units absorbed @20¢	2,000		
Total, third year	$2,100		

By these entries, inventories would increase during the third year by a total amount of $300, composed of the following:

1,000 units replaced at the original LIFO price (10¢)	$100
1,000 units increase at average annual price (20¢)	200
Total inventory increase, third year	$300

The excess cost of replacement over the LIFO price, $100, would be deducted on an amended income tax return for the year of liquidation. The $100 on the books, on the other hand, would be absorbed into factory costs (or into some other appropriate account such as surplus) during the year of replacement. Stated in another way, the financial income for the year of liquidation can only be corrected by making a charge during the year of replacement to factory costs, to some other revenue account, or, because an earlier year is affected, to surplus.

Assume, on the other hand, the use of the replacement reserve. Liquidation would be reflected on the books in this manner:

Factory Costs	$1,440	
Inventories		$1,380
Inventory Replacement Reserve		60
9,000 units absorbed @16¢		

Replacement and use during the third year would be reflected by these entries:

Inventories	$2,400	
Accounts Payable		$2,400
Factory Costs	$2,040	
Inventory Replacement Reserves	60	
Inventories		$2,100

In this case the overstatement of profits during the year of liquidation, which amounts to $40, would have been entirely eliminated had the estimated replacement price of 16¢ per unit been the actual replacement price. Furthermore, costs during the year of liquidation would have been more properly stated, from the standpoint of LIFO accounting, because current costs at the 16¢ rate would have been consistently matched against current revenues. Thus we may reach the conclusion that it is advantageous to use the replacement method if the inventory liquidations are involuntary and if current replacement costs are higher than the LIFO price.

We must also recognize that the book overstatement of profits during the year of liquidation will be minimized if the reserve method is used, and that it may be eliminated entirely if the actual replacement cost equals the estimated cost which is used as the basis for the reserve. In any event, there is a possible book overstatement of profits (or understatement on a falling market) which must be taken into consideration in examining a financial statement of any company taking advantage of this section of the Code. If the liquidation should occur early in a particular year and replacement later in the same year, the overstatement (or understatement) if any, will occur in the interim reports, but will be corrected when the annual report is prepared.

Since the replacement of inventory which has been involuntarily liquidated will result in a tax refund if the replacement price is higher than the LIFO price, and if the replacement occurs in a fiscal period after liquidation within the three-year limit, then a question as to the advisability of recognizing the probable future tax refund as a "contingent asset" presents itself. In the example given, the estimate replacement cost is $60 higher than the LIFO value. If then at the end of the accounting period, the inventory had not been replaced, but the current replacement price was 16¢ per unit, then replacement at the $60 in excess of the LIFO value would represent a net expenditure by the company of only a part of the $60 ex-

cess. The taxing authorities will stand part of the cost, the amount of which will depend on the tax rate applicable to the company during the year of liquidation. The advisability of recognizing the potential tax refund is subject to question because of the many variables involved, but it is nevertheless sometimes used.

Another interesting fact should be pointed out in connection with the carry-back and carry-forward of net operating losses and of unused excess profits credits. If the amended tax return claiming an additional deduction due to the replace-

APPENDIX I

COMPARISON OF INVENTORY VALUES, COST OF GOODS CONSUMED, AND PROFITS
(Based on Hypothetical Figures)

	First-in, First-out Basis Pounds	*Price*	*Amount*	*Last-in, First-out Basis* Pounds	*Price*	*Amount*		
1st Year—1940								
Inventory at beginning	4,000	$0.1000	$ 400	4,000	$0.1000	$ 400		
Purchases during 1940	8,000	.1200	960	8,000	.1200	960		
	12,000	.1167	1,360	12,000	.1167	1,360		
Inventory at end	4,000	.1200	480	4,000	.1000	400	$80*	
Consumption	8,000	.1100	880	8,000	.1200	960		$80*
2nd Year—1941								
Inventory at beginning	4,000	$0.1200	$ 480	4,000	$0.1000	$ 400		
Purchases during 1941	8,000	.1600	1,280	8,000	.1600	1,280		
	12,000	.1467	1,760	12,000	.1400	1,680		
Inventory at end	3,000	.1600	480	3,000	.1000	300	180*	
Consumption	9,000	.1422	1,280	9,000	.1533	1,380		100*
3rd Year—1942								
Inventory at beginning	3,000	$0.1600	$ 480	3,000	$0.1000	$ 300		
Purchases during 1942	12,000	.2000	2,400	12,000	.2000	2,400		
	15,000	.1920	2,880	15,000	.1800	2,700		
Inventory at end:								
From beginning of year	—	—	—	3,000	.1000	300		
From current purchases	—	—	—	2,000	.2000[2]	400		
	5,000	$ .2000	$1,000	5,000	$ .1400	$ 700	300*	
Consumption	10,000	.1880	1,880	10,000	.2000	2,000		120*
4th Year—1943								
Inventory at beginning	5,000	$ .2000	$1,000	5,000	$ .1400	$ 700		
Purchases during 1943	10,000	.1700	1,700	10,000	.1700	1,700		
	15,000	.1800	2,700	15,000	.1600	2,400		
Inventory at end:								
From beginning of year	—	—	—	3,000	.1000	300		
				2,000	.2000	400		
From current purchases				1,000	.1700	170		
	6,000	.1700	1,020	6,000	.1450	870	150*[1]	
Consumption	9,000	.1867	1,680	9,000	.1700	1,530		150

[1] During the four-year period, profits have been $150 less on the LIFO basis than they would have been on FIFO, the decrease being represented in a lower inventory valuation.

[2] This replacement in the third year is presumed to be based on a voluntary liquidation occurring in the second year.

ment of involuntarily liquidated inventories at higher prices should result in a net operating loss or in an unused excess profits credit for the year of liquidation, then the net operating loss carry-back or carry-forward as provided in Section 122 of the *Internal Revenue Code*, or the carry-back or carry-forward of the unused excess profits credit as proved in Section 710, might well affect an earlier year or a later year.

As an example, let us assume that during the year 1944 the minimum amount of a company's inventory for LIFO purposes was reduced because of its inability to obtain imports of its raw materials from certain enemy-occupied foreign countries. Subsequently, in 1946, the decrease is replaced. If the replacement is at a higher price than the LIFO price at the time of the involuntary liquidation, the excess will be shown as a deduction in amended 1944 tax returns. If this additional deduction results in a net operating loss or an unused excess profits credit, or both, it may be necessary also to amend the tax returns for the years 1942 and 1943, together with those for 1945. The amendments for the year 1942 and 1943 would result from the carry-back provisions, whereas any amendment of the 1945 return would be based on the carry-forward of any amounts of carry-back which are unused in 1942 and 1943. In effect then, the replacement of any involuntary liquidation of inventory might well result in the amendment of tax returns for the year of liquidation and also for two years prior to the year of liquidation, as well as for every subsequent year between the year of liquidation and the year of eventual replacement.

The LIFO method has advantages particularly when units priced under it are similar and when inventories are extremely large. Furthermore, on a rising market it results in lower taxes. During a period of several years, the profits before taxes may tend to equalize themselves. But if market prices increased during periods of high tax rates and decreased when tax rates were lower, the companies which use LIFO would have disbursed, for taxes, a smaller amount than they would have under FIFO. Conversely, if market prices increased during periods of comparatively low tax rates and decreased when tax rates were higher, the total tax bill would be higher, and thus the net after taxes lower, than when FIFO is used.

APPENDIX II

COMPARISON OF INVENTORY VALUES AND PROFITS, BY LIFO METHOD AND FIFO METHOD

(Based on an actual case)

Year	*Inventory Values* *FIFO Method*	*LIFO Method*	*LIFO Inventory Higher (or Lower*) than FIFO*
1941	$2,044,831	$1,615,569	$ 429,262*
1942	4,166,481	3,096,556	1,069,925*
1943	5,364,889	4,251,692	1,113,197*
1944	5,383,970	4,305,094	1,078,876*

Year	*Profits* *FIFO Method*	*LIFO Method*	*LIFO Profits Higher (or Lower*) than FIFO*
1941	$ 902,294	$ 473,032	$429,262*
1942	1,542,368	901,706	640,662*
1943	1,452,714	1,409,442	43,272*
1944	1,584,324	1,618,645	34,321

PROFIT-SHARING BONUS PAYMENTS IN THE INCOME STATEMENT

R. K. Mautz

The increased adoption of employee bonus plans by business corporations and the increased amounts paid out under such plans warrant consideration of the nature of these payments and the proper method of reporting them in the income statement. The possible variety of employee bonus plans is almost endless, and it is therefore difficult to consider them in the abstract. Hence the following assumed bonus program, patterned somewhat after an actual case, is presented as a more concrete basis for analysis.

This program calls for four separate bonuses paid to four different, but in one case overlapping, employee groups as follows:

1. Factory Workers' Bonus:—a semi-annual bonus to all qualified factory workers (the qualification requirement under all four plans is six months of uninterrupted service) based upon ability and length of service. The payment to each employee is computed at 10 per cent of the individual's annual earnings at the time he first qualifies and increases 1 per cent for each six months of successive employment until a maximum of 15 per cent is reached.

2. General Employee Bonus:—an annual bonus to all employees including factory workers but excluding employees covered under the general staff and executive bonus plans. The total bonus is to consist of 7 per cent of the earnings of the corporation for the current year after all operating costs and expenses and after the regular dividends on preferred stock, but before deducting the costs of any other bonus plans, Federal income taxes, increases (or decreases) in surplus reserves, or dividends on common stock. Division among qualified employees is to be proportional to their annual earnings.

3. General Staff Bonus:—an annual bonus to all executive officers and department heads except the president and the chairman of the board of directors. The total bonus is to consist of 5 per cent of the net earnings of the company computed on the same basis as the general employee bonus and divided among participating employees in the same manner.

4. Executive Bonus:—an annual bonus to the president and the chairman of the board of directors. The total bonus is to consist of 1.5 per cent of earnings of the corporation for the current year before deducting Federal income taxes and increases (or decreases) in surplus reserves, but after deducting all operating costs and expenses, payments under other employee bonus plans, regular preferred stock dividends, and an amount equal to 6 per cent of the total of common capital stock, surplus, and surplus reserves. The amount of the bonus is to be divided equally between the president and the chairman of the board of directors.

A significant difference is immediately apparent between the factory workers' bonus and the other three plans. It alone is not dependent upon the annual net income of the corporation; it must be paid whether the enterprise operations result in net income or not. The other three plans call for bonus payments only if the corporation does have net income for the period, and in each case the bonus payments are measured directly in proportion to income. These are profit-sharing bonuses in every sense of the word.

In effect, the factory workers' bonus is merely a part of the worker's regular wage paid separately, presumably to encourage

and reward long service and good employment records. There is no implied intent to share corporate profits with the employee in this type of bonus. The true nature of payments under this plan as a part of ordinary wages is more apparent in the case at hand when it is remembered that the same employees who receive these payments also participate in the general employee and general staff profit-sharing plans.

Payments under the other three bonus plans are quite as definitely not a part of ordinary employee wages. True, the employee who receives a profit-sharing bonus looks upon it as part of his annual "pay," yet he must realize that his bonus depends upon profitable operation of the corporation. The fact that payments under these plans depend upon and vary directly with enterprise profits establishes them as something quite apart from regular wages, which must be paid at established rates regardless of the success or failure of enterprise activities. The effect (and generally the purpose) of any profit-sharing bonus plan is to give participating employees "a stake in the business," an equity in the net earnings. Like holders of common stock, they benefit directly when the corporation has earnings and in proportion to the amount of such earnings.

The similarity between the equity of an employee under a profit-sharing bonus plan and that of the holder of common stock can easily be carried too far. The employee has no privilege of vote, he has no share in assets upon dissolution, and his equity in earnings commonly is dependent upon resolution of the holders of common shares or of their chosen representatives. Yet the participating employee does have a certain equity in corporate earnings (to which earnings he is capable of making a more direct contribution than are stockholders) and payments under such profit-sharing plans are distributions of profits as surely as are common stock dividends. And to the extent that preferred stock dividends are looked upon as a fixed charge, profit-sharing bonus payments are more in the nature of a profit distribution than are such preferred dividends.

If we assume that the corporation in question has sufficient income in the current year to assure payments under all four bonus plans, the problem is raised as to just how such payments should be presented in the income and surplus statement. The obvious and generally accepted treatment is either (1) to lump bonus payments with regular wages and to classify them according to whether the employee's wages are included in cost of goods sold or in operating expenses, or (2) to show them as a special item in operating expenses. Under current accepted practice a combined income and surplus statement, assuming no extraneous items, would appear in about this fashion:

Net sales
Cost of goods sold
  Gross profit on sales
Operating expenses (classified if desired)
  Net income from operations
Federal income taxes
  Net income for the year
Surplus at beginning of year
    Total net income and surplus
Dividends on preferred stock
Dividends on common stock
    Total dividends
      Surplus at end of year

The factor workers' bonus would be included in cost of goods sold (ignoring here the inventory as not pertinent to the point at issue); the general employee bonus, the general staff bonus, and the executive bonus would be included either in cost of goods sold or in operating expenses.

This treatment is quite proper for the factory workers' bonus, which is accurately considered to be a payment of wages. However, it disregards the real nature of the other three bonuses (they being distribu-

tions of income) and also fails to consider the order of priority of such bonus payments. If we keep in mind that these bonus payments are not operating expenses but distributions of income, and if we recall that the order of claim upon current income is roughly: (1) preferred dividends; (2) general employee and general staff bonuses, (3) a 6 per cent return on common stock equity, (4) executive bonus, and (5) the remainder to common stock, a somewhat different arrangement of the income and surplus statement suggest itself as follows:

Net sales
Cost of goods sold
  Gross profit on sales
Operating expenses
  Net income from operations
Federal income taxes
  Net income for the year
Dividends on preferred stock
  Net income after preferred dividends
General Employee Bonus and General Staff Bonus
  Remainder after general employee bonuses
Dividends on common stock
  Remainder after common dividends
Executive Bonus
  Remainder of net income to surplus
Surplus at beginning of yenr
  Surplus at end of year

If this procedure of deducting bonus payments and other distributions of income one at a time from the current year's incomes is followed all the way, difficulty is encountered in dealing with Federal income taxes. Profit-sharing bonus payments are deductible items for Federal income tax purposes, and the bonus resolution provides that these payments are to be based upon an income figure before Federal taxes; therefore it seems that in a step-by-step deduction form of statement the bonus payments should be deducted before Federal taxes. However, this would require that preferred dividends, which precede all profit-sharing bonuses, and a 6 per cent return on the common stock equity, which takes precedence over the executive bonus, would likewise be deducted prior to Federal income taxes if the strict order of priority of claim upon income is maintained. This is a presentation which would be found objectionable by many and would be difficult to defend in any circumstances.

All in all, the lengthy step-by-step deduction statement illustrated has little to recommend it except that it does attempt to place the various distributions of corporation earnings in the order in which the board of directors intended them to take precedence. The form shown was not presented as a suggested arrangement of income statement but only to indicate an alternative to the accepted procedure of including profit-sharing bonus payments in operating costs and expenses.

In settling upon the most appropriate presentation of any item in financial statements it is not enough to consider only the nature of the item in question. Some thought must be given to the point of view from which the statement is to be presented. If the income statement is considered to be a report to the common stockholders and is primarily concerned with computing the net increment in their interest in the corporation which is due to the year's operations, then such items as employee bonus payments of any type, preferred dividends, and income taxes are all in the nature of operating expenses. The order in which they are deducted is then not overly important; it does not matter greatly whether they are deducted before or after determining net income for the year just so they are deducted before obtaining the final figure of net income to common stockholders. This type of income statement is predicated upon the belief that the corporation is an organization operating solely for the common stockholders with its primary function being to earn income for them.

However, these are not the only possible

interpretations of the income statement or of the corporation. More and more the corporation is viewed as a form of business organization drawing funds and services from a variety of sources and owned by a variety of equity interests, no one of which is to be considered as all-important. Under this conception of the corporation all classes of stockholders, creditors, employees, government, and even the consumers of the corporation product have an interest in the enterprise. However, not all these interests have a claim upon, or share in, enterprise net income; only certain ones benefit directly as the corporation earnings are large or small. Whether these interests share in income because of their investment contract with the corporation because of government fiat, or because the board of directors has so provided, they do share in enterprise income.

If this view of the corporation is accepted, the income statement becomes not merely a computation of net return to the common stockholders but a report of corporate income, costs, and expenses, and a showing of the distribution among the various participating interests of the net income earned during the period. Under this theory, profit-sharing bonus payments should be reported as one of the distributions of net income. The following is suggested:

Net sales
Cost of goods sold
  Gross profit on sales
Operating expenses
  Net income from the year's operations
Distributions as follows:
  Federal income taxes
  Dividends on preferred stock
  Profit-sharing bonuses to employees
  Common stock dividends
    Total distributions of current income
Remainder of current income retained in the business
Surplus at the beginning of the year
  Surplus at the end of the year

In case dividends cause distributions of income to exceed current income, the excess dividends could be deducted after the beginning surplus had been added to the undistributed portion of current income.

This particular presentation has the advantages of showing profit-sharing bonus payments as a distribution of income, of grouping all distributions of current income together to show their similarity, and of bringing together enterprise income and the distribution thereof.

In the light of this analysis of the nature of profit-sharing bonus payments and the interpretation of the income statement as a report of corporate income and its distribution among various participating interests, it is submitted that the proper way to report profit-sharing bonus payments in the income statement is among the distributions of net income after determination of the net income from operations for the period. Inclusion of such payments as an operating expense represents either a failure or a refusal to recognize them as distributions of income.

COST ANALYSIS FOR EQUIPMENT REPLACEMENT

WALTER B. MCFARLAND

THE analysis of costs for use in equipment replacement decisions is not a new topic, for much has been said and written on the subject. However, one who reads this literature finds advocated a confusing diversity of formulas and methods for computing and comparing costs. The objective of this article is therefore to examine these differences and to develop an approach to the problem which will be logically sound and also workable in the solution of practical business problems. It will be limited to methods of determining and comparing costs for use in deciding whether or not to replace an existing piece or type of equipment with a new or different machine capable of performing the same function.

The first step in developing a method for analysis of costs to be used in decisions as to replacement of equipment must be a clear statement of the principle underlying the comparison of alternatives in the selection of equipment. From this it is possible to determine what facts are needed and with this in mind one can proceed to collect the data. A cost comparison can then be made with assurance that the results will be reliable within the limits of the precision with which the cost figures have been measured. It will also be found that this approach can simplify a problem the solution to which has often been made complex and confusing.

TYPE OF COSTS NEEDED

In a replacement study it is necessary to compare the cost of accomplishing a given object by the use of new machines with the cost of doing the same work with equipment already possessed but not yet entirely worn out. The firm should retain its present equipment until management has reason to believe that savings realizable from replacement will eventually result in larger net profit than will be shown by continuing to use the old equipment. This comparative effect on the income statement is the ultimate test of any replacement decision.

The variety of methods and formulas used in comparing costs in replacement studies arises primarily from the lack of a clearly defined concept of the type of cost needed under the circumstances. It is thus another example of the rather common failure to recognize the fact that the term "cost" is a broad one and that it is first necessary to define the kind of cost needed before the actual figures can be computed.[1]

For the purpose of a replacement study the costs needed will have the following characteristics:

(1) They are prospective future costs; i.e., they are an estimate of what actual operating costs will be if a specific machine or method is used. Since two or more options are being compared, there will be a different set of costs for each type of equipment under consideration. These costs include both (a) actual cash outlays that must be made in the future, of which expenditures for direct labor and direct materials are examples, and (b) costs of certain opportunities which must be foregone when a specific course of action is deceded upon. Thus if the old machine is retained, one cost of keeping it is the loss of the money that might be realized by selling it. Or if the old machine is replaced, the loss of the opportunity to earn interest on the capital invested in the new machine

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[1] See "The Uses and Classifications of Costs," *N.A.C.A. Bulletin*, Section II, May 15, 1946; "The Economics of Business Costs," Walter B. McFarland, ACCOUNTING REVIEW, June, 1940.

is a cost of replacement. It may be pointed out that this is a problem in cost economics and not in cost accounting, for opportunity costs have no place in the accounts.

(2) The only costs really necessary to know in making the decision are those costs which will differ from one option to another. Those costs which will be the same regardless of whether or not a replacement is made have no bearing on the problem. Thus it is essential to know what effect the replacement will have on usage of direct labor, power, and repairs, but costs such as salaries of factory executives, lighting and heating the factory, etc., may be unchanged regardless of whether or not the replacement takes place. These latter items do not affect the comparison and can be disregarded in the replacement study.

This concept of cost differs from that used by the accountant in keeping the company books, for the books of account contain a historical record of what the company has spent during a given period whereas the replacement study aims to show how future costs will differ if the equipment is changed in some specified manner. For the replacement study the accounting history of past expenditures associated with the old machine is useful only as a basis for predicting future costs of its operation. The cost figures appearing in the replacement study are therefore related not to the existing figures in the accounts but to the figures which will be recorded in future periods. It is the function of the replacement study to tell management how the future profit and loss statements will be changed if old machines are discarded and new ones purchased. While the costs needed for a replacement study thus cannot be determined directly from the books, it is important to keep in mind the relationship it has to the books, for the test of the correctness of the method employed in the study lies in whether or not it provides a correct prediction of the effect each option will have on the company's net profit figure.

In the past, the preparation of these cost analyses for equipment replacement studies has generally been carried out by engineers and the best discussions of the subject are to be found in engineering literature rather than in writings on accounting. However, the task is one at which the cost accountant is more and more frequently being called upon to assist. In reality, selection of equipment involves a combination of (a) the engineer, who is competent to judge technical aspects of equipment design and performance; (b) the accountant, who can help in translating the physical characteristics of equipment into costs and their effect on the company's financial statements; and (c) the executive, who must weigh the options and make the decisions. With the evolution of the cost accountant from a bookkeeper to a staff assistant to management, it seems that students of cost accounting should be taught to solve cost problems of this type in addition to those of a purely bookkeeping nature.

PREPARATION OF THE COST COMPARISON

Before any cost figures can be assembled for comparison in a replacement study, there must be an exact definition of the task to be accomplished by the alternative types of equipment. Particularly important here is the need for comparing cost performance in accomplishing the same level of output, because the speed and capacity of optional machines will usually differ. When operated at capacity an expensive automatic machine may show a decided cost advantage over a slower machine which requires more hand labor, but this advantage is not realized unless the increased output can be used. When comparing costs of machines with different capacities, it is therefore necessary to decide what rate of production will be wanted and then to compute costs of obtaining

that number of units per period with each of the optional types of equipment under consideration.

However, the additional capacity of a new machine may have potential value should the company's sales increase, and this factor may determine the purchase of equipment which shows little or no present saving because of incomplete utilization. At the time the replacement study is made, such an advantage can seldom be measured in terms of dollars and cents and it must therefore be treated as an intangible for consideration apart from the measurable costs.

A second consideration in definition of the problem is to specify the time over which the comparison is to be made. A replacement which requires a large additional investment may be economical over a sufficiently long period of time, but if the comparison is made for a shorter period, it may be preferable to retain the old machine. The following figures illustrate this situation:

	Old Machine	*New Machine*
Present value (old machine) or cost (new machine)........	$2,000	$20,000
Annual operating costs exclusive of depreciation........	5,000	1,000
Annual depreciation charge, assuming both machines to have a future useful life of 10 years.....................	200	2,000
Total annual operating costs..	$5,200	$ 3,000
Annual saving (new over old).		2,200

On the other hand, if it is assumed that the probable useful life of the machine is only four years there will be no saving from replacement.

	Old Machine	*New Machine*
Present value (old machine) or cost (new machine)........	$2,000	$20,000
Annual operating costs exclusive of depreciation........	5,000	1,000
Annual depreciation charge (assuming each machine to have a useful life of 4 years).....	500	5,000
Total annual operating costs..	$5,500	$ 6,000
Annual saving (old over new).	500	

COMPARISON OF SAVINGS

There are in use a number of ways expressing the cost advantage which one machine has over the other. Basically, these call for expression of savings as either (1) reduction in total annual cost of production, or (2) reduction in unit cost of product made. Other common methods which are really derived from these two are time required for the new equipment to pay for itself out of savings and the rate of return on additional investment provided by cost savings. Correctly computed and properly interpreted, any of these methods yields a fair comparison and can be used as the basis for a sound managerial decision. Often it is useful to express the same data in several ways. Thus the amount of total annual savings shows the effect the change will have on the company's annual net profit. A knowledge of unit-cost saving may be useful if a change in price is contemplated. The rate of return anticipated on added investment will be useful in helping to choose the best application of available capital.

It is necessary to use extreme care with unit-cost figures derived from a replacement study. Unit costs are frequently misleading because they have not been based upon the same annual output for both types of equipment under comparison. Another source of difficulty in unit costs lies in the fact that a replacement study generally omits costs which will not be affected by the replacement, and unit costs therefore do not include all costs of producing goods with the equipment in question. When unit costs are desired it is always safer to prepare the replacement study to show first the savings in total annual costs. This total can then be reduced to unit form if desired.

Many firms replace equipment only when the expected savings will pay for the machine in a specified time. This time is from one to three years in perhaps a

majority of cases.[2] Such a policy has the virtue of safety and conservatism, especially if obsolescence is rapid. However, these arbitrarily set requirements may prevent replacements which would pay if the real economic life of the equipment were considered.

REPLACEMENT FORMULAS

This process of comparing costs for replacement has often been reduced to formulas. While this procedure is convenient for those who prefer to deal with mathematical symbols, all replacement formulas have serious shortcomings which must be recognized.

(1) Formulas lack flexibility and do not always fit the specific problem to be solved.

(2) All formulas are based upon implicit assumptions which are too often overlooked in evaluating the conclusions drawn from application of the formula.

(3) A great many of the formulas offered for the purpose have serious defects. Among these are failure to base the comparison upon the same annual production for both machines, an inadequate analysis of variable elements of overhead cost, and the improper treatment of depreciation. Formulas which purport to give comparative unit costs are especially likely to be faulty in these respects.

(4) The use of formulas tends to become mechanical, with a resulting neglect of intangibles and the often considerable margin of error involved in measuring factors entering the formula.

In general, it seems better to prepare a simple comparative statement of costs for each replacement study.

MEASURING THE COSTS

When making a replacement study, every cost of significance must be included in order to compare the cost characteristics of alternative types of equipment. While it is impossible to itemize all the costs which should be considered in a specific replacement study, some of the most important will be briefly discussed.

[2] See *American Machinist*, Vol. 65, No. 2; Rickard, James F., "Equipment: To Buy or Not to Buy," *Chemical Industries*, March, 1935.

DEPRECIATION

The initial cost of the proposed new machine should include all special equipment such as tools, jigs, dies, etc., which will remain with the machine in the shop. Estimated installation charges should also be added in order to obtain the total outlay that will have to be made to get the machine into place and ready to use. This figure will then be the base upon which depreciation, interest, insurance, taxes, and similar fixed charges will be computed. Annual depreciation charges should be sufficient to write off the cost of the machine during its expected useful life regardless of the fact that the physical life may be longer or the maximum rate allowable for income tax purposes may be lower.

One of the principal points of difference in practice in replacement cost studies is in the treatment of depreciation on the existing equipment. Closely associated with this is the question of what treatment should be accorded the loss which occurs when the resale value of old equipment is less than its book value.

If the theory advanced earlier in this study is followed, the annual depreciation charge on old equipment should, for purposes of the replacement study, be based upon the present cash value of the equipment and the expected remaining useful life that it will have, assuming that no replacement is to be made. This present cash value may be measured by the trade-in or resale value. Or, if the old equipment would be retained for stand-by use, it should be assigned a value representing what the company might reasonably pay for similar equipment devoted to the same use. In other words, the future depreciation cost that will be incurred by retaining the old machine cannot be greater than the amount of cash that could now be realized by disposing of the equipment.

This cash value is often less than the present book value of the machine, but the

unamortized book value can be disregarded in the replacement study because it will not require any future expenditure. It represents costs of past operations rather than future operations. In fact, had it been possible to forecast the exact time when the old machine would be retired, the machine would now be written down to its cash value through the earlier use of annual depreciation charges sufficiently large to charge off the original cost of the machine during the time it was in use.

In practice, a loss from writing down the book value of old equipment to its cash value at the time of replacement is not always treated thus. Some firms charge the loss to the cost of the new equipment on the theory that the new equipment should bear the loss occasioned by its displacement of the old machine. There are three principal objections to this procedure.

(1) From the economic point of view, the investment in the old machine represents a sunk cost and as such it does not determine what future operating costs will be. Since in a replacement study we are seeking to compare only future operating costs, such facts as the price paid for the old machine, the depreciation formula chosen, and the original estimate of the serviceable life of the machine do not change what will have to be spent tomorrow.

(2) From the accounting point of view, this method often results in carrying in the balance sheet as an asset the unamortized loss after the old equipment has been retired. This is accomplished either by adding the write-off loss to the book value of the new asset and depreciating it, or by setting up the loss as a deferred charge to be amortized by future debits to profit and loss. Such a practice requires the listing among the assets on the company's balance sheet of an item which is in no sense of the word an asset. In fact, there is no difference between carrying among the assets a deferred loss on equipment retired and continuing to show the worthless account of a customer among the receivables.

(3) From the managerial point of view, carrying forward the loss can do nothing to insure its recovery in the future. In fact, the practice may actually hinder the company from making the most of future opportunities because it distorts the cost figures used as a basis for managerial decisions. This distortion comes from the attempt to require future operating costs to bear both the depreciation on equipment currently in use and the depreciation on equipment the services of which no longer benefit operations. Such costing practice may prevent economical replacements, and as a result the firm may find itself at a disadvantage in competition with other concerns that have installed newer equipment.

Some writers have pointed out that it really does not matter whether book value or cash value of the old equipment is used if the analysis is carried far enough, for the total net profit over the life of the equipment will not be changed. However, as a practical matter, the replacement study must be made by comparing annual operating costs, for future net profit figures will be affected by many factors besides savings from equipment replacement. Here depreciation on the old equipment must be calculated on present cash value if a correct view of the saving in operating costs is to be obtained.

However, it should be emphasized that the making of a replacement study does not mean any change in the depreciation charges in the books unless and until the old machine is actually replaced. If no replacement occurs, the accountant should continue to base his charges for depreciation upon the original cost of the equipment. The replacement study itself is prepared entirely apart from the books of

account and in itself does not affect the accounts. When changes in equipment do take place, the entries to reflect these changes will be made in the usual manner.

INTEREST ON INVESTMENT

The accountant ordinarily does not include interest on invested capital among operating costs, but for the purposes of a replacement study it is essential that consideration be given to interest on investment. If interest is omitted, a machine which is fast and economical of labor but expensive to buy will be unduly favored in a comparison. It is ordinarily sufficient to calculate interest on the average investment, since more refined compound interest methods will give results that differ but little over the short periods of time generally under consideration. Average interest also has the advantage of simplicity, which makes it easily understood by nontechnically trained executives who must review reports.

The rate of interest used should not be less than that which must be paid to obtain capital. In many instances the exact rate to be used is not important since many other factors in the study represent estimates which are so crude in nature that a variation of several per cent in the interest rate chosen will be immaterial.

RENTAL OR SPACE COSTS

The new equipment may require more or less space than the old, but unless the replacement will affect the total outlay made for space or unless there is some other valuable use for space released by the replacement, space costs can be disregarded in the study. Following are several illustrations of this statement:

A Co. installed new machines which occupied less floor space in its shop than did the old equipment. There was no other use for the vacated space and no measurable saving in the cost of owning and maintaining the building. Hence space costs were unchanged by the replacement and there was no saving attributable to reduced space requirements of the new machine.

B Co. replaced old equipment with new machines and was thereby able to expand another department. Had this change not been made it would have been necessary to construct a new building. Here the new equipment was properly credited with a substantial saving in space costs.

VARIABLE OVERHEAD COSTS

The existing basis of overhead distribution and the rate in use should not be applied to the new equipment unless it can be clearly established that no material change in overhead costs will be occasioned by the replacement. If the new equipment is very different from the old, a refiguring of overhead costs is almost always necessary.

As an illustration of this situation, a company had under consideration an extensive mechanization of operations which had previously been performed largely by hand. Factory overhead had been allocated on a direct-labor hour basis because variable overhead costs fluctuated quite closely with the direct-labor hours worked. However, the new equipment was largely automatic and would substantially reduce the number of employees in the shop. Costs of supervision, timekeeping, and personnel and similar expenditures connected with the number of employees at work decreased. On the other hand, costs of power, repairs, maintenance, and like expenditures associated with machine use increased. While it could easily be seen that the new equipment lowered direct-labor costs, only by a careful analysis of changes in variable overhead costs could a complete picture of the possible savings from replacement be determined. However, there are instances in which present overhead rates can be applied to the proposed new equipment without material error. This is most often true when the replacement constitutes only a small part of the total equipment.

Direct costs can be estimated in the usual manner from the known characteristics of the equipment. They are seldom responsible for fundamental errors in making the comparison needed for a replacement study.

INTANGIBLE FACTORS IN REPLACEMENT

The preceding discussion has been limited to equipment differences which can be measured in terms of dollar costs. There are, however, many factors of an intangible nature which may have a very important influence upon a replacement decision. While these factors must be discovered by analysis of each specific case, some typical examples are:

(1) Change in quality or appearance of product
(2) Effect on employees' safety
(3) Attitude of unions toward the change
(4) Advertising value of the installation
(5) Possible future uses for increased capacity
(6) Flexibility in use of equipment

While these items must be left out of consideration when assembling cost figures, they should not be neglected. In fact, a favorable balance of intangibles may on occasion outweigh an unfavorable result from comparison of the measurable costs. This is, of course, a matter to be determined by executive judgment. As an aid to the executive, the replacement study should include a list of all non-measurable factors that can be discovered, together with a brief appraisal of the significance attached to each. Such a step will prevent these items from being overlooked altogether and also provide for systematic consideration of the importance that each should receive in the final decision.

CONTROL OF FUTURE COSTS

In order to assure realization of the costs which were anticipated when a decision was made involving the use of new equipment, it is highly desirable that the operating costs experienced after the equipment has been installed be compared with the costs which were predetermined in the replacement study. Experience has shown that many new installations do not, in the beginning, effect a cost reduction but instead bring a cost increase. Then, as experience is gained and methods of using the equipment are perfected, costs can be brought down. This latter result is not, however, likely to be realized to such an extent, or perhaps not at all, unless management knows how far actual costs deviate from those which were believed obtainable when the installation was decided upon.

When a standard cost system is in use, the costs developed by a carefully prepared replacement study can often serve as standards for control of actual costs experienced after operation of the new equipment begins. Even if standard costs are not used, it is well to make frequent comparisons between actual costs and costs estimated in the replacement study until management feels sure that expected cost reductions have been accomplished.

PROFIT PLANNING AND BUDGETARY CONTROL*

Paul M. Millians

We who work in commercial credit know from our day-to-day contact with accounting and accountants (in industrial and consumer financing and in the credit insurance activities of the American Credit Indemnity Company) that good accounting gives protection to business profits and progress. The most important single piece of information a business can have is that which tells management at what stage of the constantly changing course of profit it is at any given point, and what its decisions on the future should be. And this is the function of accounting.

Beyond its importance to the individual business, in war and in peace, in our at least partly free competitive economy in America, accounting is necessary in order to understand how goods and services are produced and used, thus to reduce the national economy into its elements. And in the noncompetitive economy of Russia—as another example of the importance of accounting—accounting has become the object of political science. In the absence of competition, accounting measures are used to establish values in terms of prices and costs, and to establish incentives in the far-reaching way in which incentives are being used in that collectivist state.

"Profit Planning and Budgetary Control" is a well-worn topic; volumes have been written on it in the literature of American management and hundreds of meetings have been devoted to its discussion. However, the necessity for discussing business planning and budgeting remains undiminished because there is still too much rule of thumb in American business. Management rather generally has not been responsive to planning and budgeting as an instrument for effective control of business operations.

Roger W. Babson said some time ago that in his search for what makes a successful business he had brought out one single fact: the fact that for five thousand years men had been succeeding by guess; a few succeeded, others groped and died. And as the years continue to fall from the calendar men of business continue to grope along an unplanned, uncharted course to profit.

The reasons for this failure of management to use budgeting more effectively to control operations apparently rest in the old adage that "What man does not understand he tends to oppose," and this suggests a vantage point of two questions from which to approach our topic. They are: What is a budget? What are the values of a budget?

In examining these questions we shall deliberately stick to a set of principles and not implicitly insult the intelligence of the reader by discussing accounting classifications and procedures. It is assumed that natural functions of the business have been carefully determined and that the financial and cost procedures follow these natural functions—rather than just being a general assortment of income and expense accounts added up to totals. Unless accounting procedures follow natural functions the construction of an effective operating budget is impossible.

WHAT IS A BUDGET?

There seems to be a deep-rooted and rather widespread conviction in business

* A paper before the Louisville Association of Cost Accountants.

that if you can't "guess" at what revenue and costs are going to be, why forecast? How can planned operations be practical with so many chance factors in business operations? But certainly no accountant thinks of an operating budget as being a prophecy or some gaily colored speculative plan.

No business is static; all business has a way of changing without notice. Hence it has long been recognized that an operating budget must be "flexible," and must be altered from month to month to follow the changing course of the business. Indeed it is for this very reason—because operations cannot be "guessed at"—that an operating budget holds its chief value.

An operating budget when properly constructed is a master plan of not precisely what is going to happen, but a plan of what will have to happen in accepted measures of activity during an operating period if certain profit results are to be achieved. Such an operating plan breaks the business down to every unit big enough to influence the total operating figure substantially, and measures these units individually and also relatively in their action and interaction on the profits of the business as a whole. The plan also gives currently to management the result of decisions already made, and supports judgments on what the profit result will be if certain changes are made, or if certain changes beyond control of management should occur.

The great fault of most budgets is that they fail miserably and tragically to give management the answers needed for decisions on current operating problems. I have known many companies with fairly elaborate budgets (so-called) in which, nevertheless, nearly all significant facts needed to support current management decisions had to be developed by little men running around with columnar pads and pencils making disjointed comparisons that followed no trend and frequently misled rather than helped, because the answers they gave were not properly tied to all factors influencing total profit results.

What is the net contribution of each natural division of operation to the total profit or loss result? What would be the net influence on profits if some losing department was discontinued? If volume increased 10 per cent, what would the change in net profit be with the same fixed cost? On present costs how much could volume go down before losses occurred? In each division of operation? In total? How much loss? At any level of fixed costs or of costs that tend to vary with volume, what is the break-even point in operations?

These questions are not theorems of an accounting textbook. Questions like these go to the very core of good management; they are very real questions; they are very practical questions. The right kind of operating budget should give answers instantly and currently.

What is a budget? Watched by those schooled in its use, the operating budget is a very highly polished instrument of management control. Actual results will never follow the budget any more than the master of a vessel can always follow the up-and-down cross lines on a navigator's chart—purely imaginary lines which divide the earth's surface into parts. The lines of latitude and the vessel's position in relation to them are the product of man's thinking, and it is the same with the well-constructed operating budget of a business.

FIVE VALUES OF A BUDGET

Clearly, the first value we think of is that the budget is an aid to management in eliminating waste and in directing the course of the business along profitable lines, that is, in identifying loss operations so that such conditions can be remedied. However, this particular value of a budget

is a commonplace theme of every-day discussion, and therefore I should like to speak about values beyond this which are sometimes overlooked when profit planning and budgeting are discussed.

And as the first of these "beyond values" I name the liberation of top management from time-consuming detail.

The solution of the mariner's problem was the compass; it put something inside ships to sail by and brought liberation of ships from the coast line. By the same token, an operating budget of the kind here roughed out should liberate men in top positions from the coast line of detailed supervision. Accountability and responsibility can then be delegated, because the discretion and judgment of those responsible for various operations rest hard by measured results. Thus men in top positions have more time to carry on their own functions which cannot be delegated, the increasingly important function of leadership. If the whole mental energy of men in top positions of management is absorbed in carrying on day-to-day details of administration, the important problem of continuous improvement has to be neglected, and in addition there is too little time for study of broader fundamentals which tie the business with the trend of business at large. Watching outside trends which affect particular business operations is a major management problem in the confused economy of today.

In somewhat of a reverse order the first value of the operating budget suggests the next value we shall discuss—developing leadership.

Peter Drucker in his thoroughly interesting book about General Motors, *Concept of the Corporation*, discusses at considerable length the corporation "as human effort." And he says among other things that a business must produce its own leadership or it cannot survive; and that the only way to produce leadership is to give men responsibility down the line—"a maximum of independent command at the lowest possible point and an objective yardstick to measure performance at these commands."

If the operating budget, as it should be, is drawn up from the talents of all who have an important contribution to make, one certain result is to uncover leadership at lower levels. And in its final form the operating budget also provides the objective yardstick to measure both performance and the degree of responsibility that can be safely delegated to the lower commands.

The third "beyond value" of a properly constructed operating budget I shall call teamwork.

Through this very same process of drawing talents from below and of giving command at the lowest levels, individual strength is brought together in the big main result. A loyalty that rises above the prestige and interests of individual jobs and a sense of family is brought about. A feeling of mutual togetherness is developed, which means that scattered thoughts and abilities coalesce instead of staying apart like blobs of mercury to produce inefficiency and internal discord.

Important? Organizing human efforts to a common end—to keep men of strength working loyally together—is the first job of management.

The fourth value of an operating budget I shall call a more positive attitude toward business operations.

An operating budget sets a goal—an ideal. And the coordinated effort toward reaching that goal which the budget induces builds a powerful counter force against negative thinking. No business has ever grown great on a philosophy of inhibitions, and successful management of tomorrow's business will depend importantly upon the removal of negative forces and the substitution of a positive view toward the

fresh horizons ahead. Far too many businessmen think negatively in terms of what must be averted rather than of what can be accomplished.

The fifth and final "beyond value" in an operating budget I name the courage of decision.

Procrastination in business affairs is not only a thief of time but a cold murderer of progress. Indecisions and delays, deliberation and postponement, slow down operations and constitute a serious drag on profits, and as such these should be avoided at all cost. Decision is a product of courage and courage is inspired by knowledge, knowledge dispels fear and speeds decisions. The exact knowledge that comes from the analysis of operations incident to sound planning and from the frequent comparison of operating results with a well-made budget gives the courage that speeds important management decisions.

PROFIT PLANNING AND BUDGETARY CONTROL

May I protect what I said by adding a postscript? Any sailor can tell you that no lighthouse ever saved a ship from sinking; all it did was light the way. And no accounting figure and no operating budget will ever keep a business from sinking, for accounting reflects, it does not create; and accounting at no point can substitute for management, ability, and judgment.

Certainly, as we all realize, it is possible for business to be too factual. Harold Whitehead, the London business consultant, tells the story about an executive who could always marshal facts to prove why new ventures could not succeed. The head of his company said of him: "His arguments are perfect. I just can't refute them. But I'm letting him go because he's too logical in considering cold facts. We'll never grow so long as his logic prevails. He forgets the forces of spirit, of courage, of determination. He lacks vision and the divine spark of inspiration."

Nevertheless, good accounting is an indispensable force in business progress. Through good accounting weakness and waste are made apparent; it keeps inefficiency from being concealed in total profit figures; it gives the "beyond values" we have discussed: time for leadership, developing of leadership, teamwork, a more positive attitude toward business, courage of decision.

Every business, surely, should have the illumination and the unity which disinterested accounting knowledge can provide.

LOT RELEASE COST ACCOUNTING IN THE AVIATION INDUSTRY

Frank P. Smith

Companies in the aviation industry, particularly those manufacturing or assembling airplanes and major subassemblies, have adapted to their use a job-lot type of cost accounting based on specific numbers of planes or parts in a "lot" or "release." During the recent war period an individual lot might represent hundreds of units costing many millions of dollars. Production of such magnitude will probably not be required in the postwar years, but the cost procedures developed for such production can be utilized to meet current accounting requirements.

Determining the cost of an airplane, regardless of the methods employed, is not a

simple procedure. The difficulties of such cost determination may seem greater today than they actually are, as a result of the problems encountered during the war years; on the other hand, the rapid and radical developments resulting from present experimentation may actually create greater difficulties in the determination of accurate costs than have been experienced in the past. The determination of the cost of this highly specialized product, designed to meet exacting tests and produced in an atmosphere of constant change and improvement, is not a project to be passed over lightly.

Some of the principal problems involved in "lot" cost accounting for aviation companies are discussed in the following paragraphs. This discussion is based on the writer's experience in a government auditing organization during the war period and contemplates that a substantial part of airplane manufacturing will continue to be for the government.

The lot or release system of determining costs of airplanes is becoming increasingly important as a result of the inclusion of price redetermination provisions in many government contracts. Such provisions are of many different types. In some cases the price of a plane or part is redetermined at completion of a specific number of units; in some cases a particular item of cost, for example, overhead, is redetermined at a specific point of time; in other cases the price is redetermined at completion of a specified percentage of an entire contract. All redetermination provisions are intended to provide for the renegotiation of price, or types of cost, on the basis of actual experience. This is likely to be of particular significance during the years immediately ahead as companies in the aviation industry undertake to produce new types of planes and to meet specifications and tests undreamed of in the prewar years.

PROBLEMS OF PRICE REDETERMINATION

One of the principal problems resulting from a price redetermination provision is that of adjusting the company's production and accounting methods to the provisions of the contract. For example, the redetermination provision may require the review of prices at completion of a number of items which is different from the number of units the company ordinarily uses for cost determination or production purposes. In some cases the production methods adopted to meet the needs of a contract may require the utilization of two or more plants which in the usual case manufacture lots of different numbers of units. In other cases the contract may require special features for certain planes or parts but not for all units produced. Such conditions require modification of the company's usual production and cost accounting procedures in order to have costs available for forecasting and negotiations which coincide with the company's actual experience with the particular contract. It is to the interest of both the company and the government to have available at the redetermination point costs which involve the lowest number of projections and conversions in order to restate experienced costs in terms of the redetermination provisions of the contract.

Some of the problems encountered in pricing production lots for planes or for parts are peculiar to the aviation industry, but many of them are basic in any job-lot system of accounting when applied to highly specialized production. In most cases the accumulation of costs by contracts is desirable with, of course, a further breakdown by lots within the contract. However, other systems are in use which provide current costs approximating lot costs but do not provide contract costs. As an example, one company maintains costs by product on a standard-cost basis with monthly variances determined, by

product, to adjust book costs to approximate actual costs. In such cases any redetermination must usually be made on the basis of a number of units which is different from the number stated in the provisions of the contract and the cost of items produced in the period is subject to any errors made in estimating inventories.

The problem of determining inventories of work in process is not entirely eliminated by the use of specific lots for production and cost purposes. Partial shipments of lots are frequently made, with the transfer to cost of sales made on the basis of estimated costs; and work-in-process inventories are determined, in some cases, by estimating the number of equivalent completed units represented by such work.

Another problem related to the accumulation of costs by contracts is that of determining the costs of spare parts which are frequently produced concurrently with the end-product specified in the contract. The practice of intermingling costs of spares with the costs of the principal item produced under the contract was particularly serious during the war period. However, some companies have met this problem satisfactorily by establishing separate work orders and identifying costs applicable to spares production.

A similar problem results when costs of preparing kits, instruction books, manuscripts, and blueprints are intermingled with the costs of producing the principal products called for in the contract.

Changes in the specifications set forth in the contract are usually made effective with a stated unit without regard to the number of units in the production lot. The differences in costs resulting from such changes are difficult to isolate and are usually buried in the costs of the entire lot. As a result, the total costs of the various lots can be determined but the comparison and forecasting of costs on the basis of experience is difficult and sometimes of little value. During the war period thousands of change orders were issued on the principal types of planes, and the planes produced at the end of a contract were frequently very different in design and performance in comparison with early production. It is probable that changes in specifications at an even greater rate may be made in the years ahead. It is doubtful that the cost specifically resulting from or related to such changes can be identified by accounting methods unless the numbers of units in a lot on which costs are computed are drastically reduced.

STARTING COSTS

Any system of costing units produced other than merely determining the total cost of the contract involves the allocation of excessive starting (or starting-load) costs for materials, labor, supplies, breakage of tools, and other like items. The problem is perhaps most often isolated in the case of labor costs as the result of the practice of charting labor cost trends. Starting costs which can be clearly segregated may be spread over all units in the contract (training costs other than on-the-line training are sometimes handled in this manner) or may be reflected by elements of experienced costs of the various lots produced. The latter procedure is more appropriate when the redetermination provision provides for both retroactive as well as prospective negotiation.

Starting costs present serious problems from the standpoint of government audit. Segregated costs apportioned over total units or by lots can be audited and verified. Likewise the government auditor can audit experienced costs by lots and verify the different unit costs. However, forecasts of such costs require statistical techniques as well as accounting analyses.

MATERIAL COSTS

There are many systems of pricing material costs in the aviation industry, such as

average, weighted average, moving average, and first-in, first-out. Some companies also add standard percentages for freight and material handling and adjust such estimates by monthly variances from actual. From the standpoint of a particular contract, the method of pricing presents no particular problem, provided the application of the method is uniform for different lots and the mechanics of computing and compiling costs are performed accurately. However, serious problems are sometimes encountered when subcontracting is practiced on a large scale. During the recent war period, subcontracting for major parts and subassemblies frequently made comparisons of individual lot costs of little value. This problem was most extreme when the prime contractor both subcontracted for a particular item and manufactured the same item. As a result lot costs would reflect the material costs for the items produced by the prime contractor plus the entire cost of subcontracted parts (which included material, labor, overhead, profit, and possibly tooling).

The determination of the value at which subcontracted parts and assemblies are to be included in lot costs, as well as of the adjustments necessary to place the costs of different lots on a comparable basis, is sometimes further complicated by reductions in the number of items to be furnished under the subcontract after the procurement of materials and tooling for the entire production has been accomplished. The resulting unit cost for the reduced number of items to be produced may be many times the unit cost used to record the subcontracted parts used on earlier production lots and there may be termination claims to handle in addition to the distorted unit prices.

Assemblies and parts produced under cost-plus-a-fixed-fee (CPFF) subcontracts also present certain problems in determining the cost of lots concurrently with production. The cost of the CPFF subcontract obviously cannot be known until the work is complete and all costs have been submitted, which may be long after production on the prime contract has been completed. The usual practice in such cases is to record deliveries from the subcontractor at an estimated price, for example, a unit price based on the total estimated cost and fixed fee. During the recent war period some companies supplemented this procedure by obtaining current estimates of costs to complete the work from their subcontractors. Current costs of assemblies and parts produced under CPFF subcontracts are usually inaccurate at best.

A more difficult problem, both from the standpoint of aviation companies and for government auditors, is that of determining what materials should have been included in the cost of a particular lot of planes or parts. In a number of recent audits by the government, a comparison of materials that were requisitioned and purchased directly for the contract with the requirements specified on bills of materials showed very large discrepancies. Such differences may result from incorrect recording of material charges but may also be caused by such factors as incomplete bills of materials, failure to include in the bill of materials estimates for normal shop losses and starting-load losses, confusion of spares costs with production costs, and failure to adjust the bill of materials for changes in specifications. A conclusive determination of material costs in relation to production requirements cannot be made without an accurate bill of materials.

LABOR CHARGES

Aviation companies have been able to segregate labor costs by lots without particular difficulty and government auditors have had little difficulty in verifying

such costs. Labor costs for certain operations most economically performed by producing a quantity sufficient for the entire contract are sometimes charged to a separate work order or are at least prorated over the different lots.

Some companies segregate rework costs by charging separate work orders with the cost of parts requiring rework and with the cost of reworking. The work order is credited with the original cost of the parts when the salvaged parts are returned to stores. The balance of the account then represents the cost of reworking, the cost of parts scrapped, and the cost of parts in process of rework. Such costs, less the value of materials in process of rework, are prorated over applicable production lots on the basis of direct labor hours.

Other companies do not segregate the cost of reworking spoiled and rejected parts but include the labor costs (and also material costs) in production costs. In such cases the cost of items finally scrapped can be removed from production costs only by separate analyses.

Overtime and shift premiums are treated as overhead costs by some companies (the method usually preferred by the government), whereas other companies regard such costs as following the basic labor charge.

The determination of labor costs, by lots, is sometimes complicated by such types of charges as retroactive pay increases, vacation payments, and bonuses but generally labor costs, by lots, can be determined without particular difficulty and can be forecast with reasonable accuracy.

OVERHEAD

The costs of perishable tools are usually handled as an overhead item and seldom involve the problems inherent in recording and allocating special tooling. The allocation of special tooling costs by contracts, and by lots, may be extremely difficult. In some cases the whole problem is disposed of by contractual arrangement but the usual procedure is to determine total tooling costs by contracts and prorate such costs over total units. If the quantity of tooling requirements varies during the performance of the contract as the result of changes in numbers of items to be produced, or when tooling becomes obsolete as the result of changes in specifications, it may be virtually impossible to determine the appropriate tooling costs to use in redetermining the prices of early production. Unfortunately, the basis for such situations rests primarily with contract provisions, changes in production methods, and changes in specifications, which occur largely without regard to accounting convenience or effect on computed costs. This situation will likely continue until contract changes are better coordinated with accounting requirements. The only solution appears to be that of working out each particular situation on a basis that is fair to both the government and the company.

With but few exceptions, the companies in the aviation industry separate overhead into at least four distinct groups: manufacturing, engineering, tooling, and general and administrative. However, little uniformity exists in procedures among various companies, and there are many differences of opinion between aviation companies and government auditors regarding the amount of overhead expense reasonably allocable to a particular lot or contract. One of the reasons for such disagreement is the practice of government auditors known as "double screening." This means simply that if direct charges are made to a particular government contract for an operation or activity normally included in overhead, for example, inspection, then the remaining overhead prorated in part to that government contract should not contain any portion of inspection costs ap-

plicable to other contracts or other types of work. Direct charges for operations which are definitely applicable to a particular contract are obviously to be preferred to the practice of throwing everything into overhead, but it is obviously inequitable to record as direct charges only those applicable to government contracts.

Differences of opinion also result from what may appear to be inconsistent practices by government auditors but which are actually different treatments of overhead based on specific provisions in the various types of contracts. For example, CPFF contracts ordinarily incorporate Section 26.9 of Treasury Decision 5000 and must be audited by the government in relation to this decision, as well as to other contract provisions and applicable government regulations. As a result certain types of costs are definitely not eligible for reimbursement; and government regulations further specify a number of types of costs which must be handled in accordance with special requirements of the various services and agencies. To illustrate, in the case of the War Department certain types of cost must be approved by the contracting officer who administers the contract. In the absence of such approval, the government auditor has no choice but to take exception to the cost. Most companies operating under CPFF contracts are aware of these regulations and some have segregated in their overhead accounts those types of costs which are clearly ineligible. This practice eliminates a great amount of detailed auditing by the government and the preparation of extensive analyses by the contractor. It is recognized that complete agreement cannot be reached in advance on all costs which the government auditor may consider ineligible, and therefore the segregation of all such costs is not to be expected. However, segregation of costs known in advance to be ineligible helps to reduce detailed auditing to a minimum and should result in more prompt settlement of overhead claims.

Unfortunately, some companies which segregated ineligible costs when they were operating with large CPFF contracts are now abandoning the segregation and are throwing such costs into the general overhead accounts for the reason that the small proportion of CPFF operations does not justify the work involved in segregating ineligible costs. This means that the whole burden of determining ineligible costs is thrown on the government auditor.

Some contracts include fixed rates of overhead (usually stated as a percentage of a specified base) although other costs are reimbursed on an actual cost basis. The rate of overhead is in some cases subject to redetermination; in other cases the rate is negotiated at the beginning of the contract and is not subject to later revision. Any change to be made in the fixed rate of overhead is ordinarily the result of negotiation between the company and the administrative contracting officer. Apparently government regulations concerning costs (including TD 5000) apply in such cases only to the extent that they are to be considered as guides in negotiating the new rate. Therefore, it appears that an overhead audit designed to provide the contracting officer with information for use in negotiating a new rate should be made strictly on the basis of sound accounting principles. Attention to documentation requirements and certain administrative regulations which apply when reimbursement for overhead is made on a cost basis can apparently be reduced to a minimum.

The performance of a contract containing a fixed rate of overhead, concurrently with a CPFF or cost reimbursement contract, sometimes results in wide differences of opinions regarding the treatment of under- or over-absorbed burden. Aviation companies concurrently performing contracts with, and without, a fixed rate of

overhead have sometimes taken the position that the amount of overhead applicable to a contract which does not include a fixed rate of overhead is determined by deducting from total overhead the amount allocated to the "fixed-rate" contract (by use of a stated percentage) and allocating the balance to all other work. This would mean that any difference between the actual overhead rate and the stated rate for the "fixed-rate" contract would be absorbed by other work. Obviously, the allocation of total overhead for cost accounting purposes should be made for all contracts, including the "fixed-rate" contract, regardless of whether to that contract there is allocated more or less than the amount determined by use of the stated rate.

The method of allocation of the various overhead expense groups to specific contracts and work orders varies among the different companies from complex multiple-burden-center systems to simple allocations made by use of a few selected bases. The use of numerous burden centers, although perhaps it produces more accurate cost information, raises a problem of reversing charges when the government auditor takes exception to costs in the overhead accounts which have been spread throughout the burden centers. The problem is handled in some cases by the government auditor's reclassifying the charges to a limited number of direct burden centers. The use of standards to distribute costs to burden centers also places upon the government auditor the task of determining that the overhead expense allocated to a government contract does not exceed actual cost.

Because of the nature of overhead expenses, it is to be expected that there will continue to be many different methods of allocating overhead, each with its advocates. Aviation companies and government auditors must be prepared to recognize different plants, periods, and conditions. An over-all plant rate may be acceptable in one case and a multiple-burden-center system in another. The ultimate test to be applied by both the company and the government auditor is that the expenses be segregated according to their nature and their relationships to the bases of allocation and that bases be selected which measure most accurately the various services rendered to production.

PIONEERS IN ACCOUNTING*

CATHERINE DEMOTTE QUIRE

IN THIS article I shall not present the results of original historical research. My emphasis will be on the pioneers of the recent past and of the future rather than on the great names of previous centuries whose contributions to accounting methods and thought have been so well covered in English by the research of Brown, Row-Fogo, Hatfield, Littleton, and others. But I do want to recall to your memory several of the steps in the development of accounting as we know it today.

The name of Luca Pacciolo will be familiar to you as the author of the earliest known exposition of double-entry accounting.

I shall pay only passing tribute to his

* A paper before a meeting of women public accountants.

memory, although I recommend that you acquaint yourselves, if you have not already done so with some of the excellent translations of his work. He is pictured as a severe-faced man, dressed in the robe of a Franciscan monk and surrounded by geometrical symbols to indicate his erudition. Read him and you will find him canny in his understanding of human weakness and realistic in his knowledge of business details. These two qualities are a part of the honorable tradition of our profession.

The next step in the growth of accounting to which I shall call attention came four hundred years later. Commercial developments in the seventeenth and eighteenth centuries, the disturbance of propertied interests caused by bankruptcies and frauds, and the growth of stronger central governments gave rise to written codes of commercial law, of which the first was the French in the late eighteenth century. The German commercial code was not promulgated until one hundred years later, although some of the provisions of the Prussian *Landesracht* of the same period as the French code satisfied the need for a body of commercial law. Whether the change took the form of codified law as on the continent of Europe, or developed under common law as in England, the need was shown for a group of disinterested and honorable experts in accounting matters who would regard themselves as trustees of property rights and interests. Herein was the seed of the profession of auditors and accountants.[1] The auditor as trustee (the German word *Treuhand* is to be translated both "auditor" and "trustee") is the second pioneer I call to your attention.

Throughout this period, women have had to do with accounts. Women accountants of today are pioneers, but perhaps not quite so much pioneers as they think. Women often acted as record-keepers (less often as independent executives) in the developing business interests of the period between Pacciolo and the promulgation of commercial codes of law. Their relation to production and private accounting has been a long and honorable one since the home was closely related to production for use or for sale. It is only in relation to public accounting that we salute the women of today as pioneers.

The credit that is due you for perseverance in the face of unreasonable obstacles and for accepting, when the country needed you, a responsibility that was denied you when the country was blind to your value—that credit we gladly give. You have proved invalid the objections to the entrance of women to this field that I heard so often in the early years of my graduate work in accounting.

My deeply-loved teacher, the late Henry Rand Hatfield, was a firm believer that the profession of accounting should be open to such women as wished to enter it. In the late twenties and early thirties, he had a succession of women graduate students. Because of his interest, he conducted a sort of informal research among his accounting friends as to the opportunities for women. Periodically he brought back to us, with a certain whimsical regret at the foibles of male humanity, the results of his research. He accumulated the following reasons that women could not be employed:

1. A client would not like to have a woman messing around in his office, and would not accept the results of her audit.

2. A woman could never rise to an executive position because junior men would not work under her.

3. (I am giving you the reasons in the inverse order of their reasonableness.) A woman would be hard to place in a public accountant's office because a firm would

[1] Cf. Littleton, A. C., *Accounting Evolution to 1900*, (New York: American Institute Publishing Co., Inc., 1933).

never send her out of town on an audit paired with one of the men. His wife wouldn't like it!

4. A woman would be more gullible on an audit than a man. Her attitude toward the records of a business might be colored by such personal appeals as an evening of dinner and dancing.

Either women have changed greatly in the past fifteen years, or you have proved that men did not know women very well. At any rate you have arrived at professional standing. These objections can no longer be advanced by any man intelligent enough to be an accountant. On the contrary, you and I know, and many businessmen know, that you have been as courageous and as persistent in your espousal of the highest standard of professional ethics as it is possible to be. By entering willingly into the gate that was somewhat grudgingly opened to you when war pressures called for full effort, you greatly eased the strain of the war and showed how great was the previous waste of productive ability.

The pioneering days of women in the profession should now be over. Their numbers should increase, not only without discouragement but even with encouragement. For it is recognized that the growth of public, private, and government accounting, together with the mechanization and division of labor, have opened many positions for which women are especially well fitted on many levels of achievement.

But I believe there is still pioneering to be done in accounting. I believe that, with a few exceptions, accountants have been too willing to rest on the laurels of past thinking, too easily satisfied to limit their responsibilities by the fences of a previous order, too lacking in initiative to embark on new fields of service to business. Certainly much new thinking is needed in all phases of human contact to pull this world back to any sense of security. And I believe this sense of security rests as much on a feeling of well-being, fair play, and continuity as it does on a certain number of dollars in the bank.

Where does the accountant fit into this picture? I am not so foolish as to suggest that the accountant should put a price on contentment and set up a balance sheet of human welfare. But you will recall that the profession developed out of the need for experts to act as trustees of property. You will remember Elbert Hubbard's cruelly exaggerated, but still apt, description of the typical auditor as a "man past middle age, spare, wrinkled, intelligent, cold, passive, noncommittal, with eyes like a codfish, polite in contact, but at the same time unresponsive, cold, calm, and damnably composed as a concrete post or a plaster of Paris cast; . . . etc."

The scrupulous trustee of property is still needed and the accountant is well qualified to serve in that way. Today's mores being what they are, property trusteeship under private or government ownership is probably more needed than for many generations.

But accounting for property in money values is not in itself enough. We are often dealing with dead issues, dead facts; and even when we know they are dead facts, we are in danger of fooling ourselves and others by the sheer dead weight that is accumulated.

I am reminded of a story which has certainly had national circulation. You will remember about the old woman, the young girl, the German officer, and the Rumanian officer who were in a compartment of a train as it entered a tunnel. In the darkness, the sound of a kiss was heard, followed by a slap. When the train emerged into daylight, the German officer had a black eye.

The old woman thought, "Yes, she is a good girl."

The girl thought, "How strange that he kissed the old woman instead of me."

The German officer thought, "I can't understand why the girl hit me when the Rumanian kissed her."

And the Rumanian officer smiled to himself, "Merely by kissing the back of my own hand, I have hit the German with impunity."

You can change the group to cover, say, the investor, the manager, the government, and the buying public, and cast them in any order you wish in some particular instance dealing with production and policy. Too often when the group emerges from the darkness of a study of financial statements, one of them will have slapped another with impunity, and no one is the wiser as to how the slap was given.

These are the four groups for whom accountants are supposed to provide expert information. The light that accounting provides in the tunnel should make impossible both the maneuver and the uncertainty as to its sources. The difference between the business world and the world of the story—the difference that points the analogy—is that as among the four groups in the business world, their immediate and the long-range interests really lie in the same direction. The slap represents economic waste—even acute economic danger because the buying public, the investor, the business executive, and the government really want productive capacity and buying power balanced on a steadily rising scale.

In calling for further pioneering in accounting, I am not asking the accountant to step out of his position as expert. We are not cast for policy-makers. We are, however, in a very special group; we know what information is available, how much it is worth, what counterbalances exist, and, supposedly, how it can most completely be presented. We are limited by the confidence imposed in us and given to us by our clients, but we can at least see that this confidence is not blind. We are limited also by the fact that the immediate client is one or another of these four groups, not all of them; it is easy to put the emphasis on their momentary differences and forget the basic community of interest. I believe that we must be imaginative and creative in our use of accounting techniques in these years of danger. And I wish to point to three ways—not new ways, but ways not yet fully accepted—in which I believe we can help the business world we serve to see more clearly its position and its responsibilities.

First, we must try to disabuse business executives and the public of the idea that the money values in a balance sheet are a measure of productive capacity. Eugen Schmalenbach, one of the great German accounting writers, in the first decade of this century began writing of the balance sheet as a link between two profit statements, a means of carrying forward those costs and obligations of a business which had not yet been liquidated through operations. From that point of view, the balance sheet becomes rather a statement of responsibilities for the future, than of potentialities. I do not need to give acknowledgment to the American accountants who have adopted a somewhat similar view, and probably independent of the German writing. I have said these ideas are not new but they are certainly not generally accepted. I venture to suggest that most executives would be astonished if you submitted a balance sheet marked largely in red "CAUTION! These are the millions you must recover. To this end you must shape your policies."

Second, I believe we must search for and devise within our own field ways of convincing the business world that the money profit figure is not in itself a measure of successful operation. As accountants we are enormously concerned with the definition of terms in the income statement and its arrangement, and with the question of

whether surplus changes are to be incorporated. These are all points which have interest and some value, but if we should suddenly agree to compose all our differences, call the final figure "X" and stick to that agreement, I venture to suggest the world would wag along quite well. As citizens, on the other hand, we must be concerned also with a wider spread of human satisfactions, and our accounting knowledge stands us in poor stead if we cannot make it serve that end.

As a field for pioneer effort, this one is the most difficult and the least touched. I want to emphasize again that I am conscious of the impossibility of putting a price on human satisfactions. I am asking only that accountants think of the responsibility of proving to business that the soundness of the individual business is directly connected with the continuing soundness of the market for its product, the continuing confidence of its investors, and the contentment and confidence of its labor force—in a word, with the soundness of its own economic community.

We have seen recently a great development resulting from the combined efforts of engineers and accountants in the field of cost accounting. I suggest that as careful thought applied to the field of human engineering would bring as great a development, and I charge that this is a field in which we may not wait for the demand to arise before we try to give the service. The problem is here. Whatever we can do to help in its solution, this we must, if necessary, force on the attention of our clients.

My third point is again one on which there has been previous work done, but not widely accepted as yet. I believe we must convince ourselves and our clients that the statements we make for them are not enough, that no comparative series of balance sheets and income statements of past operations can provide enough information for policy decisions, especially in periods of marked price change. I believe firmly that the books that are kept and the statements made from them should provide a record of what has happened with regard to past costs incurred by the business, past services rendered, and past responsibilities assumed. But to make decisions about the future, executives need to be shown in periods of falling price, for example, how much of the loss is really just a carry-over from equipment that was bought at higher prices, and how really strong the competitive position is at the present price level. Even more when prices are rising, executives need to know how much of the profit is the result of the purchase of equipment at lower prices, and to realize that increasing the productive capacity when prices have risen will not proportionately increase the profit. In other words, I believe in a second set of statements, using market price or present replacement cost less depreciation, tied into the main books each year by a series of balance-sheet and profit-adjustment accounts, whose changes would in themselves be a significant indication of the changes in the position of the business. Such statements would have the added usefulness of being a first step, and an easily taken one, in satisfying my second point. In so far as they present an up-to-date picture of operations and position they are a better measure of past successes and a better basis upon which to project the future than statements made up mainly of past costs.

This is again old stuff. Such statements are recommended by the German accountant, Fritz Schmidt, writing in the nineteen twenties, as the only ones to use. There has been writing and research in English on the use of present prices in the statements, notably Sweeney's book *Stabilized Accounting*. My point now is that it is time for us to do something about these matters.

In 1928, Mr. Hatfield addressed the American Institute on the subject, "What Is the Matter With Accounting?" Twelve years later, in 1940, he called to its attention the advances that had been made in adapting time-tested accounting practices to meet changing economic and business conditions. A war has intervened during which accountants were called upon to use all the knowledge they possessed, and to create new ways of measurement and of presentation in the effort to preserve some semblance of business independence. We are supposed to be returning to peacetime accounting, but we must not pick it up where we put it down in 1941. We must realize with the rest of the world that we work for peace. As accountants we must realize that what we tell business about its affairs is a powerful force for economic peace. We must therefore not only apply to peacetime accounting the new techniques learned under the pressure of war, we must also bring to it the willingness to search for, find, and use other new techniques as we see that they will be needed. And we must do it fast.

THE ACCOUNTING EXCHANGE

A. C. Littleton

The verbs used in the literature of auditing tell what auditors do, and therefore take on technical significance. An analytical study of word usage, by detecting differing shades of word meaning, could therefore be expected to direct attention to differing types of audit action.

What Auditors Do. In a sample of auditing literature amounting to approximately 1,720 pages, about 75 verbs were used 20 times or more for a total of over 5,000 uses. About 400 other verbs were used less than 20 times each for a total of 1,500 uses.

The most notable feature of this quantitative analysis is the fact that within a large vocabulary of audit verbs there is a high concentration upon a few words. Some 475 verbs are used approximately 6,500 times in this sample. About 85 per cent of the verbs (400 words used less than 20 times each) account for 23 per cent (1,500) of the uses. About 15 per cent (75 words used more than 19 times each) account for 77 per cent (5,000) of the uses. The top 14 words (those with more than 100 uses) appear approximately 2,700 times. Thus 3 per cent of the words make up 40 per cent of the uses. The 5 words (1 per cent) with more than 200 uses cover about 1,400 uses (20 per cent). The single word with the highest frequency (532 uses) accounted for about 8 per cent of the total.

Auditing Verbs	*Frequency of Use*
examine	532
verify	249
determine	229
ascertain	208
test	206
review	178
check	173
compare	172
investigate	142
consider	138
obtain	137
inquire	121
inspect	105
prepare	103

Fourteen verbs used 100 times or more, as above, total 2,693 uses.

Seventeen verbs used 50 to 99 times are: note, accept, scrutinize, reconcile, disclose, count, give, substantiate, see, account for, report, request, state, confirm, analyze, satisfy, audit (total uses, 1,108).

Fifteen verbs used 30 to 49 times are: provide, insist, study, prove, foot, establish, discover, include, trace, adjust, show, detect, value, take, make (total uses, 546).

Twenty-nine verbs used 20 to 29 times are: advise, read, present, have, draw, carry, discuss, decide, certify, use, suggest, submit, select, qualify, set, list, find, comment, mention, refer, observe, express, exercise care, compute, classify, treat, rely, capitalize, watch (total uses, 720).

Summary of Verb Usage

Separate Verbs	*Frequency of Use*	*Total Uses*
14	100 or more	2,693
17	50 to 99	1,108
15	30 to 39	546
29	20 to 29	720

The analysis on the next page indicates the verb preferences of different authors. The six verbs most frequently used by each author are here compared with the fourteen most-used words for the whole sample. The several sources which make up the sample are indicated by letter.

Since writers have individual vocabularies, it is to be expected that each verb-pattern would differ from that shown by the whole sample. The verbs named above are listed in the sequency of preference shown in the prior table for the whole sample. The percentage figures for each source indicate the distribution of that part of an individual's verb vocabulary which fall among his six top verbs. This section represents a varying proportion of individual vocabularies. Thus, 21 per cent of the total verb-uses in source A is con-

Frequency of Use by Authors

Preferred Verbs	*Source* A	*Source* B	*Source* C	*Source* D	*Source* E
examine	20%	37%	15%	26%	20%
verify	—	21	—	21	—
determine	—	15	—	—	16
ascertain	19	—	—	16	22
test	14	11	11	—	—
review	16	—	42	—	—
check	—	9	—	13	—
compare	17	—	14	—	—
investigate	14	—	—	—	—
consider	—	—	—	—	—
obtain	—	—	—	—	13
inquire	—	—	—	—	16
inspect	—	—	—	—	—
prepare	—	—	—	17	—
Other verbs	—	7 (audit)	9 (confirm) 9 (analyze)	7 (decide)	13 (satisfy self)
	100%	100%	100%	100%	100%

centrated in the six words indicated in his column; in B, 34 per cent; C, 43; D, 54; E, 39. Another measure of individual concentration is the percentage of verb usage reflected in the one word most frequently used; A, 5 per cent; B, 12; C, 18; D, 14; E, 9.

From the table above, it is evident that four verbs (*examine, verify, ascertain, review*) rank first or second in all five sources. These are four of the first six words standing at the top of the list for the whole sample; the other two words are *determine* and *test*. Six words rank third or fourth in individual preference. These are *ascertain* and *review* (which are also rated first or second in three sources), and *compare, prepare, determine, inquire, test*. Nine verbs are in fifth or sixth place. Only one of these ranks higher (*test* is also fourth in two lists); the others are *check, obtain, investigate, analyze, confirm, satisfy self, audit, decide*. The last five words are not among the fourteen top verbs from the whole sample; and two words (*consider* and *inspect*) that are in the top list of fourteen for the whole sample are not among the top six in any of the five separate sources.

In two sources the usage is highly concentrated at the top. Source C shows 42 per cent of the six-verb usage as falling upon *review;* source B shows 37 per cent for *examine*. The verb *examine* also rates 20–26 per cent for four other sources; *ascertain* shows 22 per cent in source E; *verify* shows 21 per cent in sources B and D.

By the showing of all the data, four verbs are favorites: *examine, verify, ascertain, review*.

Serving the Public Interest. The decade ending with 1946 has been an important one for professional accounting. A certain degree of material progress can be read from the growth in total membership, rising as it has from just under 5,000 in the semicentennial year of 1937 to a little more than 10,000 in 1946. These are impressive numbers. But an accelerated rate of growth is impressive too. This is perhaps even more significant than totals, for it speaks of forces working beneath the surface.

There is an interesting parallel between the earlier and the later years of the profession in this country. A chart of the number of practitioners named in city directories (New York, Chicago, and Philadelphia) from 1870 to 1890 reflects the

same pattern of moderate growth that is seen in a chart of Institute membership for 1916 to 1936. Directory names from 1891 to 1899 and Institute membership from 1937 to 1946 also reflect a strikingly similar pattern of accelerated growth.

Can it be that men at times detect in underlying business conditions an increased area of accounting usefulness and prepare themselves in greater numbers to service the need?

There is also evidence of spiritual progress in this decade. It takes the form of effective recognition of the fact that the public interest is deeply involved in the profession of public accounting.

The need was felt, in 1946 as in 1936, for a strong and united profession. So that members of the profession would benefit? Of course. But it would be misreading the moral qualities of professional accountants to say that self-interest rules and men were blind to the fact that strength in the profession was also a social good.

The public interest is involved, for example, in the long-run solution of the problem of recruiting for the profession. An inflow of men with high talents for success in this field will be a long-run benefit to the profession; but this will be so primarily because such men will be fertile in finding new ways to serve more clients in harmony with the needs of business and of society.

Some observers will interpret the growing tendency in the profession to favor restrictive legislation as indicating one more area where monopolistic ideas are hard at work. Actually this movement is the most tangible evidence to appear in fifty years that large numbers of professional accountants are becoming increasingly alive to the existence of two underlying facts: that the success of the profession as a whole amounts to more than the sum of the successes of its members; that the welfare of the profession (and through it, of individuals) is closely bound up with the contribution it makes to public welfare. Since dependable accounting information is indispensable in a modern industrial and capitalistic democracy, it is in the public interest that such information shall be inspected by independent, competent, and impartial experts. It then becomes a matter of public interest that the competency of the "inspectors" shall be tested and that the "inspecting" shall be restricted to the competent. This is the essence of the idea back of restrictive legislation for public accounting. And support by professional societies of this legislative development is more by far an indication of recognition that the public interest can best be served by competent individuals who are under the restraints of professional discipline than it is a sign of big ideas of occupational monopoly.

Recognition of the public interest is also evidenced by the willingness of practitioners these days to speak out when issues are at hand on which their training and experience have qualified them to have responsible views. Indeed, they form a section of public opinion that is particularly well informed in certain areas of thought. It is reassuring that they are loosening some of the natural inhibitions of professional men. This does not come easy to most of them. The fact that some do speak up is evidence that they do so from knowledge and conviction; it seldom would be from personal preference.

Past progress therefore has in part been based upon detecting the public interest underlying the profession and acting in line with that knowledge. It is reasonable to expect that it would be helpful to future progress also to continue the efforts to detect the public interest and to continue the attempts to devise suitable ways of serving the public interest.

It would serve the public interest to contribute steadily to the education of the

public, especially in the direction of eradicating misconceptions.

It is a misconception to favor a high degree of uniformity of accounting methods that may smother the natural distinctions between enterprises. It is a misconception to think of balance-sheet figures as expressing values, and to talk of profit as if it were a sum of disbursable cash. It is a misconception, to say the least, to believe that independent certified public accountants are subservient to their clients' financial whims ("hired checkers [who] never win any arguments for a different presentation"), or to imagine that truthful accounting allows for one, and only one, treatment of a given situation.

It would serve the public interest to foster technical competence in every conceivable way.

Rightly or wrongly, the view seems widely held that a very small percentage of candidates with the specified education and experience succeed in passing the accounting practice section of the usual CPA examination. To this view might be added another thought: Holding an overly-tight rein on examinations (whether by way of entrance restrictions, reexamination privileges, selection of problems, or system of grading) probably is one of the least effective ways of trying to increase average competence in the profession. Examinations constitute a negative approach at best. A positive approach to greater competence, on the face of it, should be much more promising. Undoubtedly, recognition of this fact is the supporting foundation of the Institute's growing program of research, debate, and publication dealing with professional ideas, objectives, terminology, techniques, education. And it seems likely that far more can be accomplished in the public interest, and more quickly, by striving to increase the competence of those who have already passed the qualifying examination than by using a fine-mesh screen to find the most promising new material to work upon. Nevertheless, the latter should not be neglected.

It is in the public interest to extend and improve technical education.

One of the best ways practitioners can help the schools prepare men to enter into and to grow with the profession is to supply teaching materials. There are no trade secrets among physicians. Whatever one doctor learns that could be helpful to others soon finds its way to them—by personal contact, clinical lectures, published papers. This productivity and this communication serve the public interest more than they do the individual.

Alert accounting teachers will see and use new educational materials as fast as they can mold them to classroom needs. Therefore, when professional men write papers, bulletins, books, committee reports, and speak at group meetings and conventions, they are likely to reach a wider audience than they might imagine. Indeed, that is a strong reason for more practitioners to be vocal in this way.

But education does not end with school or when one passes the CPA examination. And continuation education often will not be all that it could be, if its plan is left wholly to the initiative and resourcefulness of the individual. The need is not only for continued technical education. Many men on the way up the ladder would benefit as much from gaining a working acquaintance with such collateral subjects as economics, finance, management, not to mention even broader subjects such as rhetoric, psychology, government, history, etc.

Perhaps all too often the need for continued technical education is considered to be satisfied by accretions from the day's work. The value of experience and observation is unquestionable. But a great deal of this value takes a great deal of time to come within range. For that reason organized education (supplementary adult

education) should somehow be made available to staff members.

Some of this could be done within firm offices. For new second assistants (juniors) transitional training in accounting techniques and standards as well as drill in the needed skills; for first assistants and seniors, separate discussion groups to consider field problems, novel situations, knotty issues, new literature. Beyond that? Why not a leave of absence for supplementary studies having particular objectives? Many a man would fit himself to render better service by making a thorough study of the problems involved in controlling the finance of business; or of the techniques of organizing for efficient production within industrial enterprises; or of the intricacies of public utility depreciation and rate-making problems; or of the economics and politics of taxation.

The public interest is also in the individual's best interest to a larger extent than is usually realized.

Public Opinion. Allen Nevins not long ago in the *New York Times* analyzed the significance of public opinion in a democracy. He reemphasized the view of James Bryce that public opinion has three divisions: the views of full-time active politicians; the views of a larger body of people who interest themselves in public affairs but never seek to hold office; and the views of the "great, inert, passive body of citizens" who generally accept the guidance of others on current political issues.

But the United States is not only a political democracy. The democratic way of life also reaches into the professions, including the profession of public accounting. And in accounting, let it be noted, it extends beyond the voting methods and system of committees used in the American Institute, practices which obviously reflect a desire for representative government.

It is expressive of an aspect of democracy, for example, that the Committee on Accounting Procedure indicates (as in its report of April, 1945) that its research bulletins reflect carefully considered preferences rather than pronouncements of generally accepted practices or rules. "If the profession, if the lawyers, if the governmental bodies [the report says] believe that this committee is representative of the best thought of the profession and that it reaches its opinions after exhaustive consideration on an objective basis, the expressed preferences will become generally accepted practice." That is to say, sound views in the Committee become generally accepted practice when they finally are implemented by well-qualified public opinion.

If we do not stretch the analogy too far, it is possible to say that this special body of public opinion falls into three aspects just as general public opinion does. At the top is the 21-man Committee on Accounting Procedure and its assisting technical staff. This section of public opinion in accounting soon becomes better informed on a specific issue than any other comparable group. The next and larger section of public opinion in accounting consists of a considerable number of articulate people who are equipped by education, experience, and interest to have clear insight into accounting objectives and good judgment about ways of accomplishing those purposes. Among those so qualified will be found public accountants, private accountants, accounting teachers, governmental employees, businessmen, and lawyers.

The third section of accounting public opinion will be another large sample of the "great, inert, passive body of citizens." Here the members will be the less articulate ones in the same categories named in the second group. They too will be inclined to accept easily the guidance of others on accounting issues.

James Bryce believed that a most im-

portant objective in a political democracy should be to produce a large transfer of people from the third into the second category. It seems reasonable to believe that accounting (and society through the service that accounting renders) could also benefit from developments which would aid in transforming more of its lower-level public opinion on accounting issues.

That is the reason why a recent decade of discussion, debate, and argument, unparalleled in previous accounting history, has not been disrupting, as some might have feared, but clearly beneficial and likely to continue so.

An observant physician, Peter J. Steincrohn, M.D., F.A.C.P., has expressed a forceful thought about his own profession. Medicine has progressed as rapidly as it has only because doctors are—or become so after they get their M.D.—the most opinionated group of beings in this world. The nature of their work makes them that way. Such difference of opinion is the yeast that has been so necessary for proper growth and advancement of the science of medicine.

Would not professional accounting be benefited also if its many capable members were to become more opinionated (in the sense that the word is used above) in the cause of accounting progress? Recent accounting literature is full of examples tending to show that we can be opinionated without being "opinionated." Accounting public opinion can be a more useful force if more of the people concerned are observant and alert—and vocal.

Post-CPA Education. The usual educational sequence today is: study at college (with or without a major in accountancy); staff experience with a public accounting firm; certification through a state CPA examination. If education stops at that point everyone is a loser—the individual, the firm, the client, the profession. No one gains. But this extreme situation seldom exists, because all subsequent experience is educational and because some people exert themselves primarily to accelerate the educational effect of the day's work.

Every engagement provides not only a service for a client but also a training ground for professional personnel. We learn by doing what needs to be done. But even then all concerned will benefit if the learner has a teacher. Are staff men clearly charged by their supervisors with a collateral duty to teach those under their supervision? Are they given helpful directions as to what and how to teach? Is their willingness and ability in this duty weighed in considering promotions? T. Coleman Andrews, elsewhere in this issue, gives some of the answers.

People in other lines of professional activity apparently are not content to let experience be educational when and if it can. Advanced professional education is often a matter of careful planning and persistent effort.

In medicine the future doctor spends four years in a medical college, perhaps after four years of science and general education. If he expects to be a skilled surgeon there are four more years of training, as intern, second assistant surgeon, first assistant surgeon, and resident surgeon, before he gains the status of chief, the responsible quarterback of a surgeon team in action. What is he doing in these four years? Listening, watching, helping, drilling. Listening to the chief's running commentary in every operation; watching the surgical techniques called for by the circumstances; helping in small details at first, in more important ones later; drilling himself in order to improve the necessary skills.

He is willing to practice tieing catgut knots that are sure to hold, even if it takes hours and hours of drill and a mile of catgut. Are there men in accounting who subject themselves to a fraction of this much drill in the small details of their own tech-

niques? The assistant surgeon may watch a certain type of operation 50 times, 100 times, before the responsibility falls to him. Perhaps accounting engagements, being further from life and death, do not require such rigorous or extensive preparatory field training. A slip-up may not be so disastrous, since in accounting the effect usually can be corrected without precipitating an emergency.

But certain questions still remain: Does the staff man in accounting see an important variety of procedures closely enough, and often enough, and intelligently enough, to grow professionally as he ought to do? Is well-graded sequential experience planned for him under the eye of a supervisor anxious to communicate his professional knowledge?

Journalism has some of the characteristics of a profession. The Nieman Foundation grants a certain number of fellowships at Harvard to promising journalists. The American Press Association supports several scholars in journalism studies at Columbia. Many subjects are taught in college that could benefit practicing journalists; and there are plenty of men available with field experience and the necessary professional aptitudes who would like to study. The financial support given to these scholarships and fellowships indicates that some men already high in journalism have a real vision of professional and social needs.

Most universities have a few graduate scholarships that are available to students who are accounting majors. But are there any such for men with a good variety of field experience in accounting? And would such men be willing to take time out for such study if it were made available? Would their firms grant leave-of-absence for adult education? Would the staff man reciprocate with an assured term of loyal service upon his return?

Public accounting is not so vital to this country as adequate military defense. Yet we may learn something from the way the Army plans adult education.

The program at West Point is to the Army what technical work in college is to the prospective professional accountant. After graduation comes field experience as a junior officer. Later the most promising have another term in school—in the staff and command school where lieutenants, captains, and majors study the responsibilities of higher ranks for strategy, tactics, and training. Again there is rotation through a varied experience after which some will go to the War College, where colonels and generals study to develop capacities for further planning and leadership. Soon new subjects will be added to this program. Attention will be given to industrial mobilization and attendant problems connected with getting material, supervising labor, and building organizations. These officers will also study the national and international problems of politics, diplomacy, and economics.

Is there any stair-step progression of technical accounting education that is even in a small degree like the Army plan —a program dovetailing advanced study with demonstrated ability and widening accounting experience? If adult education by way of texts, lectures, and problems can help captains to grow into colonels, would not adult education help senior accountants to grow into partners? Must recruits for the higher ranks be sought only among those who unaided show the most evidence of growth? Will that policy be sure to produce the necessary number of qualified leaders in a growing profession?

Upper Staff School. Sometimes accountants look wistfully toward a college of law and wonder whether it does not afford a pattern for a college of professional accountancy.

A strictly professional school may indeed be indicated for the future: when many

more people than at present decide early to devote themselves to this career whatever the length of schooling; when it has been definitely decided that professional education for accountancy must have in it a very considerable amount of business education that is neither cultural in purpose nor accounting in nature; when the idea of educational purpose shall reach beyond that of preparing to serve as a first assistant in the field and to pass the CPA examination in due time.

Until the way to a fully professional college of accountancy is clearer, perhaps there are other useful things that can be done—things which would be directly beneficial at once and would contribute in the end to the hoped-for, full-scale professional college.

Numerous schools now offer a sound program combining general, business, and accounting education in good proportions. And there are many aids in preparing to take the CPA examination. But where is there an organized program of education beyond the CPA examination and the status of senior staff accountant?

Adult education is practicable. Men of experience, certified public accountants already committed to a career in accountancy, would undoubtedly welcome well-planned continuation education in suitable dosage. The summer season is usually a time of lightened pressure of work. A given item of advanced study could be concentrated within a single limited topical area. And a sequential series of studies could be planned, each to cover thirty days, that would give flexibility of use without sacrificing continuity of growth for those taking several of the series.

Since numbers should be limited, admission could well be upon a scholarship basis. Appointments could rest upon such factors as prior education, technical experience, professional promise. Part of the basic information required should be the results of personality tests and the scores made in aptitude examinations. For taking courses in sequence, the records made in prior courses in the series would also be considered.

In a university the organization usually is not such as to make it feasible to concentrate a broad and intensive course into one month of continuous full-time work for men on leave from the active profession. A special type of school is needed. One which could, if desired, fold its camp stool and flit to another section of the country to repeat its program. One which is something more than a program of lectures; preferably one in which small classes and the seminar method prevail. If possible, the discussion throughout the term should draw sustenance in part from a reading program carried on by the students privately for three months prior to the school session, and in part from other reading at prescribed periods throughout the current term.

It would be desirable to keep the enrollment small in each course and limit a student to one course per term. The ideal would be for each course to offer enough to constitute full-time work for four weeks.

Perhaps it would be feasible to obtain the use of a small hotel in a pleasant location with recreation facilities. Concentrated, full-time study in the summer months would be made easier for most people by using this combination in different sections of the country at different times. Joining study with recreation would help justify the individual in shaping his budget to provide some of both.

But the individual is not the only one to benefit and he should not be expected to bear the full financial load of even a nonprofit undertaking. If competitive selection was the avenue to admission, some form of subsidy would be quite appropri-

ate. This would help to assure that the most qualified individuals had a chance. And it would enable the firms to contribute to the school's budget somewhat in proportion to the general benefits expected.

Some of these considerations suggest that the American Institute of Accountants should be a prime mover in the matter, with the firms in supporting roles. For example, a staff man who met his firm's standards for applying for a scholarship might be given an additional two weeks' leave of absence (with salary) to put with his regular vacation time. With this help he should be able to pay the transportation and living costs for the four-week term. Teachers' salaries and other school expenses would need to be provided for otherwise. Perhaps this could be done through the Institute, which would receive a specified sum in support of the project from the firms for as many of their scholarship recommendations as could be accommodated each season within the limits of the program. In case a fully qualified individual applied personally and directly for a scholarship in the seminar, he could make a similar contribution when and if a place was available.

Because of its entrance requirements and short-term sessions, such a program of adult education of people already experienced in the profession would not be an encroachment upon the educational services already provided by many colleges of commerce.

Since most college students are unable to stay on for postgraduate degrees, many who are capable and ambitious are not in a position to work for advancement except in the course of the day's normal routine. They may deserve help.

Fostering advanced education for men already committed to the profession and experienced in it should be a very effective way to increase the prestige of public accountants generally and at the same time to build wisely a deeper foundation for increasingly satisfactory professional service in the public interest.

PROFESSIONAL EXAMINATIONS

A Department for Students of Accounting

HENRY T. CHAMBERLAIN

THE FOLLOWING problems were prepared by the Board of Examiners of the American Institute of Accountants and were presented as the first half of the C.P.A. examination in accounting practice in November, 1946. The candidates were required to solve both problems. The weights assigned were: problem 1, 30 points; problem 2, 20 points.

The time allowed was four and a half hours. A suggested time schedule is given below.

Problem 1 .... 90 minutes
Problem 2 ....120 minutes

No. 1

You have been asked by the president of Novo Kitchen Aids, Inc., manufacturer of home appliances, to review the company's capital, surplus and reserve accounts and to make such proposals for their revision and balance-sheet presentation as good accounting may suggest.

(a) Draft a work sheet, and brief notes or adjusting entries which will indicate and explain the changes in form or content you would recommend, and (b) draw up the reserve, capital stock, and surplus sections of the balance-sheet as at April 30, 1946, as they should be presented.

On April 30, 1945, the liability section of the company's published balance-sheet appeared as follows:

Capital—		
Capital stock, preferred, $10 par—		
10,000 shares authorized and issued—		
9,000 shares in hands of public	$ 90,000	
1,000 shares held in treasury at cost of $15,000, per contra	10,000	$ 100,000
Capital stock, common, no par value—		
100,000 shares authorized, 56,000 shares issued and in hands of public	$ 224,000	
Paid-in surplus (50% on preferred shares in 1928)	50,000	$ 274,000
Current liabilities (detail omitted)		388,000
Reserves for—		
Doubtful accounts	$ 2,000	
Postwar rehabilitation	1,000,000	
Depreciation	384,000	
Fire and accident insurance	60,000	1,446,000
Surplus		2,671,000
Total liabilities		$4,879,000

(1) On April 30, 1946, half of the shares of the treasury preferred stock which had been purchased in 1942 at $15 per share, were sold at $19 per share, the proceeds being credited to the treasury-stock account.

(2) The preferred capital stock carries an annual dividend of $1 per share, and the dividend is cumulative. As at April 30, 1945, unpaid dividends attaching to each share amounted to $5 which was liquidated on January 1, 1946, by issuing to preferred stockholders 9,000 shares of no-par-value common stock on which a value of $5 per share had been declared.

(3) A cash dividend of $1 per share was declared to preferred stockholders of record April 1, 1946, payable May 1, 1946.

(4) Balances in the reserves for doubtful accounts and depreciation at April 30, 1946, were $2,200 and $401,000, respectively.

(5) The reserve for postwar rehabilitation was created

in the preceding year by a provision out of income for a like amount. The intent was to set aside profits for possible but unknown future contingencies. During the current year, the sum of $500,000, also charged to income, was added to the reserve.

(6) Plant-extension costs, amounting to $285,000, for the manufacture of a post-war product unlike anything the company had previously put out, were charged against the rehabilitation reserve during the year 1945–46.

(7) The fire-insurance reserve was increased during the year by a further provision of $10,000 charged to profit and loss.

(8) It was decreased by $2,000—the cost, less $400 depreciation, of a building destroyed by fire on April 15, 1946. Additional costs arising out of the fire, and not yet appearing on the books, for injuries to persons are expected to aggregate $1,500.

(9) Surplus, as shown on last year's balance-sheet, consisted of the value, ten years ago, of a donated plant site, amounting to $134,000; gains of $6,300 from the purchase and sale in 1941 of 2,000 shares of treasury preferred stock; and undistributed earnings, $2,530,700.

(10) During the past year, charges for the dividend in no-par-common stock and the cash dividend, and for an adjustment of $4,100 in the previous year's tax liability reduced the account to $2,612,900.

(11) Book net income for the year, after deducting reserve provisions, amounted to $222,500.

No. 2

From the following information relating to Prep School, prepared a work sheet showing opening balances, transactions, also adjustments for the year ended June 30, 1946, and closed trial balances as of June 30, 1946, for each of the four classes of funds into which the general ledger is divided: viz., general fund, plant funds, endowment funds, and student loan funds.

The balances of the general ledger accounts as at July 1, 1945, are as follows:

Cash—for general use	$ 1,000	
Cash—from alumni subscriptions for new dormitory	2,000	
Cash endowment	45,000	
Cash—for student loans	1,000	
Tuition receivable	12,500	
Investments—temporary investments of general cash	4,000	
Investments—endowment	250,000	
Stores	15,000	
Alumni subscriptions for new dormitory (due Sept. 30, 1944)	8,000	
Student loans receivable	3,500	
Educational plant:		
Financed from original and subsequent endowments	600,000	
Financed from tuition funds	50,000	
Financed from alumni subscriptions	200,000	
Financed by grant from state and local government	50,000	
Accounts payable for supplies		$ 3,500
Unpaid expenses of alumni subscription campaign		1,000
Balance		1,237,500
	$1,242,000	$1,242,000

1. Endowment investments and $40,000 of the endowment cash represent principal of endowment funds held under terms providing that the income therefrom shall be used only for operating expenses of the school. The balance of endowment fund cash represents accumulated income not transferred from the endowment to the general fund.
2. Student population was 150 students. The tuition rate was $1,000 per school year per student except for six full scholarships and three partial (one-half) scholarships.
3. 90% of current tuition was collected and $100 of the balance is considered uncollectible.
4. Tuition receivable of prior years was collected in the amount of $12,000 and the balance is considered uncollectible.
5. Charges for operating expenses incurred and supplies purchased during the year totaled $135,000.
6. Inventory of operating supplies at June 30, 1946, amounted to $13,500.
7. Accounts payable for operating supplies and expenses amounted to $2,000 at June 30, 1946.
8. All temporary investments of general cash were sold on July 1, 1945, for $4,300 and accrued interest of $100.
9. Endowment investments having a book value of $25,000 were sold for $27,500, including accrued interest of $500.
10. Investments were purchased by the endowment fund trustees at a cost of $50,000.
11. Interest on endowment fund investments not sold during the year amounted to $20,500 for the year and was all collected in cash.

12. The endowment fund trustees transferred $22,500 to the general fund bank account.
13. As a result of the continued alumni subscription campaign, additional subscriptions in the amount of $65,000 were received for the purpose of providing a new dormitory. These subscriptions were payable one-fifth at the date of the pledge and one-fifth quarterly beginning January 15, 1946.
14. 5% bonds in the amount of $50,000 were issued for cash on January 1, 1946, to provide funds for immediate construction of the new dormitory. Interest was payable annually.
15. Contracts in the amount of $70,000 were let for construction of the new dormitory out of subscriptions.
16. The contract for construction of the new dormitory was 50% completed on June 1, 1946, and payment for one-half of the total amount, less a retained percentage of 10%, was made on that date.
17. All alumni subscribtions of the current year were paid on the due dates; those due previously were also paid in full.
18. Tuition receipts amounting to $5,000 were used to build additional bleachers at the athletic stadium.
19. A riding stable costing $4,000 and financed during a previous year from tuition receipts was destroyed by fire. Insurance recovery was $4,500; the building will not be replaced.
20. Student loans amounting to $3,500 were made.
21. Student loan collections amounted to $4,000 including $200 interest.
22. Expenses of the alumni subscription campaign were paid in full in the amount of $1,500.

Solution to Problem 1

(*a*) See next page.

Solution to Problem 1

(*b*)

Capital stock and surplus			
Preferred stock, par value $10.00 per share, 10,000 shares authorized of which 9,500 shares are outstanding and 500 shares are held in the treasury		$ 100,000.00	
Common stock, no par value, 100,000 shares authorized of which 65,000 shares are outstanding and 35,000 shares are unissued		269,000.00	
Paid-in surplus		58,300.00	
Capital surplus arising through the donation of plant site		134,000.00	
Earned surplus:			
Reserve for post-war rehabilitation	$1,500,000.00		
Reserve for fire and accident insurance	70,000.00		
Balance	2,691,600.00	4,261,600.00	
		$4,822,900.00	
Less cost of 500 shares of preferred stock held in treasury		7,500.00	$4,815,400.00

Solution to Problem 1 (a)

NOVO KITCHEN AIDS, INC.
Working Papers—Capital Accounts
April 30, 1946

	Balances April 30, 1945	*Entries, per books, for the year* Dr.	Cr.	*Balances April 30, 1946 (per books)*	*Adjustments* Dr.	Cr.	*Adjusted Balances April 30, 1946*	
Treasury stock 100 shares, at cost	$ 15,000.00		$ 9,500.00	$ 5,500.00	(11) $ 2,000.00		$ 7,500.00	Deduct from capital stock and surplus.
Capital stock, preferred	$ 100,000.00			$ 100,000.00			$ 100,000.00	
Capital stock, common	224,000.00		(2) $ 45,000.00	269,000.00			269,000.00	
Paid-in surplus	50,000.00			50,000.00		(11) $ 2,000.00 (16) 6,300.00	58,300.00	
Current liabilities	388,000.00		(3) 9,000.00	397,000.00		(15) 1,500.00	398,500.00	
Reserves:								
Doubtful accounts	2,000.00		(4) 200.00	2,200.00			2,200.00	Deduct from receivables.
Postwar rehabilitation	1,000,000.00	(6) $285,000.00	(5) 500,000.00	1,215,000.00		(13) 285,000.00	1,500,000.00	Show under net worth.
Depreciation	384,000.00		(4) 17,000.00	401,000.00			401,000.00	Deduct from assets.
Fire and accident insurance	60,000.00	(8) 2,000.00	(7) 10,000.00	68,000.00		(15) 2,000.00	70,000.00	Show under net worth.
Surplus	2,671,000.00	(2) 45,000.00 (3) 9,000.00 (9) 4,100.00		2,612,900.00	(12) 500,000.00 (14) 10,000.00 (16) 140,300.00	(17) 4,100.00	1,966,700.00	Earned surplus.
Net income for the year			(10) 222,500.00	222,500.00	(15) 3,500.00 (17) 4,100.00	(12) 500,000.00 (14) 10,000.00	724,900.00	Add to earned surplus.
Capital surplus arising through donation of plant site						(16) 134,000.00	134,000.00	
	$4,879,000.00			$5,337,600.00			$5,624,600.00	

(1) To record sale of treasury stock.
(2) To record dividend on preferred stock paid-in common stock.
(3) Dividend on preferred stock.
(4) To record increases in reserves for doubtful accounts and depreciation.
(5) To increase reserve for contingencies.
(6) To record plant extension costs.
(7) To increase fire and accident reserve.
(8) To charge depreciated cost of building destroyed by fire against reserve.
(9) To record tax adjustment of prior year.
(10) To record net income for the year.
(11) To adjust treasury stock account and to credit profit on sale to paid-in surplus.
(12) To correct net income for the year. The provision for contingencies is properly treated as a surplus reserve.
(13) Plant extensions should have been capitalized rather than applied against the contingency reserve.
(14) To correct net income for the year. The provision for self-insurance is a surplus segregation.
(15) To charge income for the fire and accident losses, to correct reserve and to set up liability for injuries.
(16) To reclassify surplus, crediting $6,300.00 to paid-in surplus and $134,000.00 to capital surplus.
(17) To charge income tax adjustments to income.

Solution to Problem 2

PREP SCHOOL

Working Papers
July 1, 1945 to June 30, 1946

	Trial Balance July 1, 1945 Dr.	Trial Balance July 1, 1945 Cr.	Transactions and Adjustments Dr.	Transactions and Adjustments Cr.	Trial Balance June 30, 1946 Dr.	Trial Balance June 30, 1946 Cr.
General fund						
Cash	$ 1,000.00		(13) $ 22,500.00 (3) 140,250.00 (8) 4,400.00	(7) $136,500.00 (19) 5,000.00	$26,650.00	
Tuition receivable	12,500.00		(2) 142,500.00	(3) 140,250.00	14,750.00	
Investments	4,000.00			(8) 4,000.00		
Stores	15,000.00			(6) 1,500.00	13,500.00	
Accounts payable		$ 3,500.00	(7) 136,500.00	(5) 135,000.00		$ 2,000.00
Fund balance, June 30, 1945		29,000.00		(1) 5,000.00		34,000.00
Due from endowment fund			(12) 21,000.00 (1) 5,000.00	(13) 22,500.00	3,500.00	
Tuition income			(25) 150,000.00	(2) 150,000.00		
Scholarships			(2) 7,500.00	(25) 7,500.00		
Bad debts			(4) 600.00	(25) 600.00		
Reserve for uncollectible tuition				(4) 600.00		600.00
Operating expenses and supplies			(5) 135,000.00 (6) 1,500.00	(25) 136,500.00		
Profit on sale of investments			(26) 300.00	(8) 300.00		
Interest on investments			(26) 100.00	(8) 100.00		
Endowment fund income, 1945–1946			(26) 21,000.00	(12) 21,000.00		
Expended for construction			(19) 5,000.00	(26) 5,000.00		
Net income from operations (fund balance)				(25) 5,400.00		5,400.00
Other changes in fund balance				(26) 16,400.00		16,400.00
	$ 32,500.00	$ 32,500.00			$ 58,400.00	$ 58,400.00
Plant funds						
Cash from alumni subscriptions	$ 2,000.00		(18) $ 47,000.00	(23) $ 1,500.00	$ 47,500.00	
Cash for construction			(15) 50,000.00	(17) 31,500.00	18,500.00	
Cash—other			(20) 4,500.00		4,500.00	
Alumni subscriptions	8,000.00		(14) 65,000.00	(18) 47,000.00	26,000.00	
Educational Plant						
From endowments	600,000.00				600,000.00	
From tuition	50,000.00		(19) 5,000.00	(20) 4,000.00	51,000.00	
From alumni subscriptions	200,000.00				200,000.00	
From state and local governments	50,000.00				50,000.00	
Unpaid expenses, subscription camp		$ 1,000.00	(23) 1,000.00			
Fund balance, June 30, 1945		909,000.00				$909,000.00
Subscriptions—income			(27) 65,000.00	(14) 65,000.00		
Bonds payable				(15) 50,000.00		50,000.00
Construction authorized			(16) 70,000.00	(17) 35,000.00	35,000.00	
Reserve for encumbrances			(17) 35,000.00	(16) 70,000.00		35,000.00
Construction in progress			(17) 35,000.00		35,000.00	
Retained percentage on construction				(17) 3,500.00		3,500.00
Tuition receipts used for construction			(27) 5,000.00	(19) 5,000.00		
Excess of insurance recovery over cost of building destroyed			(27) 500.00	(20) 500.00		
Expenses of subscription campaign			(23) 500.00	(27) 500.00		
Bond interest during construction			(24) 1,250.00	(27) 1,250.00		
Accrued bond interest payable				(24) 1,250.00		1,250.00
Changes in fund balance				(27) 68,750.00		68,750.00
	$910,000.00	$910,000.00			$1,067,500.00	$1,067,500.00
Endowment funds						
Cash, principal	$ 45,000.00		(9) $ 27,000.00	(1) $ 5,000.00 (10) 50,000.00	$ 17,000.00	
Cash income			(1) 5,000.00 (11) 20,500.00 (9) 500.00	(13) 22,500.00	3,500.00	
Investments	250,000.00		(10) 50,000.00	(9) 25,000.00	275,000.00	
Fund balance, June 30, 1945		$295,000.00	(1) 5,000.00			$ 290,000.00
Due to general fund			(13) 22,500.00	(12) 21,000.00 (1) 5,000.00		3,500.00
Profit on sale of investments				(9) 2,000.00		2,000.00
Investment income			(12) 21,000.00	(9) 500.00 (11) 20,500.00		
	$295,000.00	$295,000.00			$ 295,500.00	$ 295,500.00
Student loan funds						
Cash	$ 1,000.00		(22) 4,000.00	(21) 3,500.00	$ 1,500.00	
Student loans receivable	3,500.00		(21) 3,500.00	(22) 3,800.00	3,200.00	
Fund balance, June 30, 1945		$ 4,500.00				$ 4,500.00
Interest on loans				(22) 200.00		200.00
	$ 4,500.00	$ 4,500.00			$ 4,700.00	$ 4,700.00

Solution to Problem 2—Continued

(1) To record amount owing to general fund by endowment funds.
(2) To record tuition receivable and scholarships.
(3) To record collections on account.
(4) To provide for uncollectible accounts.
(5) To record operating expenses and supplies purchased.
(6) To adjust stores inventory to balance at June 30, 1946.
(7) To record payment of accounts payable.
(8) To record sale of general fund investments.
(9) To record sale of endowment fund investments.
(10) To record purchase of endowment fund investments.
(11) To record interest on endowment fund investments.
(12) To set up amount of income owing to general fund by endowment funds for the current year.
(13) To record transfer of $22,500.00 to general fund by endowment fund trustees.
(14) To record subscriptions received.
(15) To record sale of bonds.
(16) To record contracts authorized.
(17) To record construction in progress, cash payment to contractors and retained percentage.
(18) To record collection of subscriptions.
(19) To record construction of bleachers.
(20) To record insurance recovery on building destroyed.
(21) To record student loans made.
(22) To record collections on loans.
(23) To record payment of subscription expenses.
(24) To set up accrued bond interest.
(25) To close operating accounts (General Fund).
(26) To close other changes in general fund balance.
(27) To close changes in fund balance (plant funds).

BOOK REVIEWS

HERBERT E. MILLER

Principles of Accounting, Intermediate (Third Edition). H. A. Finney. (New York: Prentice-Hall, Inc., 1946. Pp. 873. $5.00.)

There is no doubt that the many instructors in the more than 250 institutions which had adopted Mr. Finney's *Principles of Accounting, Intermediate* awaited with considerable interest the appearance of the third edition. For whether the text is liked or disliked, it will be admitted that this one book has wielded a very great influence on the accounting theory and practice in this country—perhaps more than any other one book.

Three principal changes were made in the new revision. Greater emphasis has been placed on the importance of accounting theory. For that reason two new chapters have been added dealing entirely with theory and principles, and added consideration has been given to matters of principles throughout most of the text. The chapter organization and sequence have been changed. Some chapters on partnership have been transferred from the advanced to the intermediate text, and the chapters on consignments and installments were transferred from the intermediate to the advanced text.

Four or five short problems have been added to each chapter in addition to the usual long problems found in the earlier editions. These short problems, generally, are more elementary, less complex and involved, and bear some relationship to the text material presented in the respective chapters. This addition is a distinct improvement and could have been carried much farther with advantage.

The organization of the material and the sequence of the various chapters will not meet the approval of all instructors. But since each chapter or related group of chapters is more or less a complete unit, various arrangements of the chapters may be made to meet the needs or desires of different instructors.

Chapters 1, 2, and 3 appear to be used primarily for review purposes with the addition of some new and advanced material, including single entry in chapter 1 and recent developments in statement construction in chapter 3. Chapter 2 is devoted entirely to an explanation of how to close the books and might well have been omitted since this is merely bookkeeping routine which is covered in all first year texts and has no place in an advanced book.

The fundamentals of partnership accounting are covered in chapters 4 and 5, followed by four chapters on corporation accounting problems. Chapter 10 covers the fundamentals of arithmetic applied to amounts, present values, annuities, sinking funds, and related problems.

Chapters 11 and 12, on basic accounting theory, are new chapters and add some valuable material to the text. The application of principles outlined in these two chapters is left largely to the instructor since practical illustrations given are few and there is little carryover to the subsequent chapters on the valuation of various assets, and related problems of expense and income measurement and determination. It is believed that chapters 11 and 12 were not strengthened by the outline of so-called "principles" given on page 196.

The principles and practices relating to the valuation of and accounting for the various classes of assets are presented in chapters 13 to 22 inclusive. Although some new material has been added from time to time, most of this material follows the orthodox treatment of earlier editions. The problems of "cost" as against "value" are presented, if not conclusively or satisfactorily concluded.

Current, contingent, and fixed liabilities and tax bonus problems are discussed in one chapter, 23, followed by a chapter on funds. This chapter on funds might well have been covered in the discussion of other assets where two other chapters were devoted to an explanation of investments and funds. It is doubtful whether three chapters are needed for a proper treatment of investments and funds, while only one chapter covers the various aspects of liabilities. Chapter 25 outlines the principles relating to reserves, but little reference is made here to the related problems of surplus and its proper uses.

Chapters 26 to 30 inclusive are given to a discussion of the analysis and interpretation of the financial statements and follow quite closely the material given in the older edition. As in most accounting texts, this is the weakest part of book and has not benefited by the addition of principles or theory to be used in statement analysis, but consists largely of illustrative material. The chapter on comparative statements is the least effective in this section, either from the standpoint of teaching or practical use, since it consists almost entirely of tables of financial data. Some of the tables contain as many as 8 columns of comparative data, a formidable array of figures even for an experienced accountant to read and understand.

This revision will probably be more difficult to teach from, because of the addition of more theoretical material and because of small inaccuracies and inconsistencies which are incident to a revision of a text not completely rewritten. The index is adequate, although it might be improved, and the instructor will find a great amount of problem material.

Although lacking somewhat in proper emphasis on various topics, and in an over-all unity of accounting theory, the text retains that force and authoritativeness which has long made Mr. Finney's books "standards" in the field of accounting literature. And in spite of the many good and bad things which may be said of this book, it will continue to be one of the outstanding texts in this field for some time to come.

D. M. BEIGHTS

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Principles of Accounting, Advanced (Third Edition). H. A. Finney. (New York: Prentice-Hall, Inc., 1946. Pp. xi, 802, $5.00.)

"In this, the third, edition of *Principles of Accounting, Advanced*, an effort has been made to give full recognition to the developments in accounting theory, the enactment of legislation affecting accounting, and the changes in the relative importance of the different subjects discussed, which have occurred during the somewhat more than ten years since the publication of the second edition." (p. v)

A rearrangement of subject matter between advanced and intermediate will be of interest primarily to teachers. Material on the organization of a partnership, the division of partnership profits, the admission of a partner, and the incorporation of a partnership has been transferred from advanced to intermediate. Material on the retirement and death of a partner, the sale of a partnership business, and the dissolution and liquidation of a partnership remains in the advanced volume. The chapters on consignments, instalment sales, and correction of statements and books have been transferred to advanced from intermediate. Transfers have been made "in response to requests." (p. v)

Many teachers may prefer a full discussion of partnership accounting in intermediate while others may prefer postponement to advanced. The revised editions of intermediate and advanced assume a middle position and one wonders why the subject of partnerships has been so divided. If this is a compromise of preferences it seems not unreasonable to assume that in attempting to please two groups holding divergent views the author will have pleased neither. The question of a proper division of subject matter between intermediate and advanced is a debatable one and a reasonable unanimity of opinion among teachers on the proper answer may be difficult to obtain. Perhaps the solution is to require all intermediate students to purchase both volumes whereupon the teachers may make his own selection of subject matter.

The list of subjects below will serve to describe the content of this third edition of advanced. The number of pages devoted to each subject is shown in parenthesis as a comparative measure of emphasis.

Chapters 31, 32, and 33—Partnerships (42)
Chapter 34—Consignments (16)
Chapter 35—Venture Accounts (14)
Chapter 36—Instalment Sales (24)
Chapter 37—Insurance (24)
Chapter 38—Correction of Statements and Books (12)
Chapter 39—The Statement of Affairs (24)
Chapter 40—Receiver's Accounts (14)
Chapter 41—Realization and Liquidation Report (22)
Chapter 42—Home Office and Branch Accounting (14)
Chapters 43 to 52 inclusive—Parent and Subsidiary Accounting and Consolidated Balance Sheet, Surplus Statement, and Profit and Loss Statement (188)
Chapter 53—Consolidations, Mergers, and Financing (20)
Chapter 54—Foreign Exchange (26)
Chapters 55 and 56—Estates and Trusts (32)
Chapter 57—Budgets (24)
Chapter 58—Public Accounts (34)
Chapter 59—Bank Accounting (14)
Chapter 60—Stock Brokerage (26)
Questions and Problems (224)

The author acknowledges his indebtedness for assistance in the preparation of certain chapters, to the following: Professor John C. Teevan, Northwestern University, Chapter 39; Dr. Emanuel Saxe, College of the City of New York, Chapters 55 and 56; Professor Lloyd Morey, University of Illinois, Chapter 58; Mr. Herbert Levy, partner in the firm of Paine, Webber, Jackson & Curtis, and Mr. Joseph A. Driscoll of the firm of Crook & Driscoll, Chapter 60. Chapters 58 and 60 appear much as before but this is merely evidence of the accuracy of material as presented in the prior edition. Reference to the dual system has been omitted in Chapter 58 and an illustration of Answers to New York Stock Exchange Questionnaire Part I has been substituted for the Balance Sheet With Relative Security Valuations in Chapter 60.

Chapters on foreign exchange and on consolidations have been carefully edited, rearranged, and expanded with reference to theoretical aspects particularly. Chapters on partnerships, venture accounts, instalment sales, insurance, correction of statements and books, receiver's accounts, realization and liquidation report, home office and branch accounting, and budgets appear to be relatively unchanged from those in the prior editions of intermediate and advanced, except for evidence of careful editing and improved arrangement of material.

The 224 pages of questions and problems are more than adequate. The problems are entirely new and, in addition to the usual long problems, each chapter has numerous short problems dealing exclusively with the subject matter of the chapters to which they are assigned. The questions are substantially the same as those in the prior edition but they have been edited and rearranged as to numerical sequence within each chapter. New questions have been added to a few of the chapters.

The discussion of partnership liquidation in instalments (Chapter 33), does not present the method whereby a planned schedule of cash payments to partners is prepared at the start of liquidation and prior to realization of assets. Such a schedule has many advantages—for one, it eliminates the need of preparing working papers to determine cash distribution each time an instalment is to be paid.

The presentation of consolidated statements is in agreement with current practice and the entity theory is recognized only in a footnote (p. 274).

The author regrets the existence of two bases in accounting for subsidiary profits, losses, and dividends on the books of the parent company. "For one reason, one cannot safely undertake to interpret the statements of a parent company unless he knows which basis of accounting has been used. For another reason, cases have

been known where a parent company has jumped from one basis to another in succeeding years, in order to make the best picture: showing subsidiary earnings as parent company income in a year when the earnings exceeded the dividends, and showing dividends as income in a year when the subsidiary dividends exceeded the subsidiary earnings" (p. 300). (But what of the AIA rule on consistency?)

The author suggests a solution which would give effect to the legal and economic concepts under one basis of accounting. This solution is to record the parent's share of subsidiary profits or losses through the investment account on the books of the parent but to earmark undistributed subsidiary earnings as such under parent surplus, or as a separate item under parent net worth, and to show that such undistributed subsidiary earnings are not available for dividends (p. 301). "While the suggested method does not seem to be in conflict with any legal *requirement*, it does, in the interest of sound and conservative accounting, deprive the parent company of what is probably a legal *privilege*. From the legal standpoint, dividends received from a subsidiary are income—presumably even those dividends which are in excess of subsidiary earnings since acquisition" (p. 303).

The reviewer contends that the ledger and statements of a parent should be on a legal basis with respect to subsidiary profits, losses, and dividends and that this basis only should be recognized. A method which incorporates the legal and economic concepts in one set of ledger accounts is not a solution—it adds to the confusion. Clarity is obtained by prescribing that the investment be recorded at cost. Entries to reflect the underlying book value for purposes of consolidation should be made in the consolidated working papers, in a separate set of consolidation records, or in offsetting memorandum accounts imposed on the ledger of the parent company and should not be mixed or confused with entries recording transactions of the parent as a legal entity.

This third edition of *Principles of Accounting, Advanced* will be welcomed by teachers and practitioners. An accounting library which does not contain both volumes of "Finney" is incomplete.

HARRY H. WADE

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Iowa City, Iowa

Financial Statements, Ralph Dale Kennedy. (Chicago: Richard D. Irwin, Inc., 1946. Pp. xii, 559. $4.50).

Professor Kennedy has combined in one volume a summary of accounting principles applicable to the preparation of financial statements, a discussion of the methods and techniques of analyzing financial statements, and a discussion of four specialized industries and their financial statements.

In preparing the summary of accounting principles, the author has assumed that the reader of *Financial Statements* would be familiar with the fundamental principles of accounting. As a result the first six chapters represent a rapid-fire survey of financial statements and their preparation and a brief analysis of some of the problems of value and income determination. This material may possibly be helpful for groups of students of differing academic backgrounds, such as are found in many schools today, and may have been prepared to meet the needs of such groups. However, more attention is devoted to these subjects than would ordinarily be required for students beginning the study of financial analysis.

Chapters seven through sixteen cover the analysis and interpretation of financial statements and other data by means of ratios and trend methods. These subjects are discussed thoroughly. The illustrations of the various techniques are interpreted for the reader but the emphasis is principally upon the techniques involved. Included in this section is a detailed treatment of changes in working capital.

The last seven chapters of this volume include a well-written treatment of consolidations and a discussion of four specialized industries: air carriers, railroads, public utilities and commercial banks. Each of the four industries is treated in a comparable manner. For example, chapters eighteen and nineteen include a detailed treatment and analysis of the balance sheet and operating statement of an air carrier.

The various subjects discussed are supported by an abundance of illustrations. However, all of the illustrations are stated in terms of hypothetical situations or companies and are entirely divorced from references to existing companies or actual situations.

The outstanding feature of *Financial Statements* is the completeness of the presentation of the various analytical techniques.

FRANK P. SMITH

University of Rochester

Accounting Principles. J. Hugh Jackson. (Los Angeles: Charles R. Hadley Company, 1946. Pp. 779. $4.80.)

The use of the title *Accounting Principles* is an understatement of the content of this book. The use of a title such as *Accounting Principles, Forms, and Modern Business Procedures and Practices* would better describe the contents of this textbook. Such a text title would indicate an extremely comprehensive and practical book, and that is precisely what Professor Jackson has written.

This book is developed from the traditional balance sheet approach using the sole proprietorship as a basis. The first three chapters explain the balance sheet, journalizing and posting, and profit and loss accounts, completing at this point the development of the accounting cycle. From this point on through Chapter 9 the text discusses and explains the use of special journals, account classification and control accounts, purchases and sales, control of cash received and disbursed, payroll accounting, and negotiable instruments. All of these chapters are profusely illustrated with flow charts, reproductions of Charles R. Hadley Company business forms, and payroll tax forms. The chapter on payroll accounting is notable in that it includes a brief summary of social security legislation as well as dealing with the accounting problems involved.

Chapters 10 through 14 are devoted strictly to accounting principles and include periodic adjustments of

current assets and other accounts, working papers and financial statements. It is in this portion of the book that this reviewer feels that Professor Jackson has tried to do too much. In addition to describing the adjusting procedures, these chapters include discussions of valuation bases, cost concepts, valuation reserve methods, working paper procedures, statement classification, and analysis of financial statements. I doubt that the beginning student is far enough advanced in his accounting training to assimilate and understand all of the material that is presented at this point.

Chapter 15, on special books of original entry, completes the first half of the text. In this chapter the unit record system, daily record system, and cash journal system are presented with the assistance of some reproduced Hadley Company forms. Machine accounting forms and practices are also explained in connection with the unit record and daily record systems. Strip form records are briefly discussed. The material presented here is treated with an extensiveness not usually found in an introductory text and again serves to emphasize the extremely practical aspect of the book.

Departmental accounting is covered in Chapter 16, a good portion of the chapter dealing with departmental statements and the apportionment of expenses.

Up to this point in the text the only form of business organization used has been the sole proprietorship. Chapter 17, "The Corporate Form of Organization," and Chapter 18, "Bonds," present the fundamentals of corporate accounting procedures in the orthodox manner.

It was gratifying to see Chapters 19, 20, and 21 devoted to a thorough presentation of manufacturing accounting and cost methods. Chapter 19 explains manufacturing accounting principles and skillfully weaves materials, labor, and burden into work in process. This chapter carefully restricts itself to the general ledger phase of manufacturing accounting. Chapter 20 deals with the product cost phase, each element of the cost being considered from the viewpoint of controlling as well as recording the cost. This chapter again makes use of reproduced forms with specimen entries. On page 522 a summarization of the month end entries of a manufacturing concern are presented in the form of a chart. Here each type of entry is analyzed as to the purpose of the entry, time of entry, original source of entry, record of original entry used, and the accounts affected by the posting. The material on cost accounting is completed in Chapter 21 with an outline of a complete accounting system for a manufacturing concern. Here is a splendid opportunity for the student to review the complete accounting cycle. The chapter is complete with a chart of accounts, illustrations of eight records of original entry with model entries, ledger accounts, working papers, and financial statements.

Chapter 22 presents the voucher system in the usual manner.

An unusual chapter is number 23 dealing exclusively with the principles underlying expense distribution and the accounting procedures by which such expenses are accumulated, analyzed, and apportioned. The treatment of this material surpasses by far the work usually found in an introductory text.

Chapters 24 through 27 cover consignments, instalments, partnerships, and branch accounting. The material on instalments devotes considerable space to the problem of discounting contracts with finance companies.

Tax Accounting, Chapter 28, The Retail Method of Inventory, Chapter 29, and Budgeting and Executive Control, Chapter 30, complete this monumental work.

Each chapter is complete with numerous questions and problems. In addition the instructor has a choice of six different general and specialized pratice sets from which to select practice material. The sets are made up of regular Charles R. Hadley Company forms which adds a distinctive touch of realism to the practice material.

Definite emphasis upon the practical application of accounting has been stressed throughout this entire text, yet the theory of accounts has not been slighted. I seriously doubt that beginning accounting students can cover this text in two semesters or three quarters. However, it would be very easy to skip selected chapters without doing the student an injustice. The format is good and the book is well written and easy to read.

ROGER W. BRIGGS

De Paul University

Professional Ethics of Public Accounting, John L. Carey. (New York: American Institute of Accountants, 1946. Pp. 124, $2.00.)

This book is a 124-page discussion of the sixteen rules of professional conduct sponsored by the American Institute of Accountants. Mr. Carey has classified these rules into three groups: those particularly designed to protect the interest of the public, the interest of the client and the interest of the profession. The discussion is in the order of importance within each of these classifications.

Each of the several rules of conduct is examined and illustrations are included in the form of recent opinions of the American Institute of Accountants' committee on professional ethics in reply to requests for interpretation of the rules.

It is significant that the first chapter is devoted to the independence of the certified public accountant in the expression of opinions on financial statements and in his relationships with his clients. The importance of independence is again emphasized in the fact that five of the sixteen rules of ethics are intended directly or indirectly to foster and to fortify the general public's confidence in the independence of the certified public accountant. It is easy to agree with the author that "it is his independence which is the certified public accountant's economic excuse for existence." Assuming technical competence, the most important attributes of the certified public accountant are independence and professional dignity, using the latter term in its broadest sense to indicate a mode of behavior becoming a professional man and a gentleman. There is little to distinguish the certified public accountant in practice from his counterpart employed in private industry other than this independence of judgment and a pride in service which puts service above profit—a pride and

self-discipline which recognize and respect the confidential relationship of his work and a duty to the client and the public.

However, the young practitioner who wonders how he can start his own practice and ethically acquire a sufficient number of clients to keep the wolf from the door will find little comfort in the author's sound advice on Solicitation (p. 99) that it is "unwise to undertake public practice until one has a sufficient circle of friends and acquaintances in a community to justify the hope that announcement of the opening of an office will bring some request for professional assistance."

There has been a need for a volume of this nature to make available an expression and interpretation of the professional rules of conduct. Too little attention is devoted to the development of the "professional attitude" in the academic training of the prospective accountant and too frequently his first years as an apprentice practitioner are spent at relatively menial tasks under conditions which are not too conducive to elevating his self-respect and dignity as a professional man. It would seem that the elements of a professional attitude and a respect for accounting as a profession could best be introduced and fostered in the university, then developed into a genuine mode of behavior in practice through the observation of his seniors and principals in practice, rather than is now so often true—one strives first to become financially successful, then ethical.

T. C. Hilliard

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Studies in Income and Wealth, Volume VIII—Proceedings of Conference on Research in Income and Wealth. (New York: National Bureau of Economic Research, 1946. Pp. 297, $3.00.)

Papers prepared for the 1944 Conference on Research in Income and Wealth have been published by the National Bureau of Economic Research under the title *Studies in Income and Wealth: Volume Eight.* The direction of the Conference program and the weight of the papers were war problems and post-war adjustments. Contributors to the program were recruited mainly from national and international administrative groups. Their immediate fields of jurisdiction brought a full background of empirical knowledge as well as critical reexamination of theoretical concepts.

In a program developing the theme of war-time problems and post-war adjustments, the need for examination, redefining, of realignment of wealth and income concepts was recognized and treated by different contributors. Particularly as attempts were made to arrive at comparative figures for the various national segments of the world economy, was there agreement as to the need for careful lines of delineation and classification in such comparisons. A recurrent discussion through many of the papers concerned the problem of evaluating the effect of governmental product and governmental services in arriving at a total income computation. With increased governmental prosecution of the war efforts and the effect of governmental direction foreshadowed in post-war operation, the necessity of general agreement on the effect of this contribution to wealth and income studies was accepted. As information pertinent to totalitarian economics of the immediate pre-war and current (1944) income production were appraised, comparable categories and universal terminology were even more necessary.

The practicing backgrounds of the economists contributing to the program, as well as the immediate need of the war period, are reflected in the Conference's evaluation of use being made of national income figures in determining economic, social and political policies. Especially with regard to contributions to be made by different nations to war and post-war relief and rehabilitation activities income figures, and adequate international comparisons on income and wealth have taken on new usefulness and purpose. Likewise, an ability to pay principle, as used in determining degrees of international responsibility in such institutions as International Bank for Reconstruction and Development, International Monetary Fund and United Nations Reconstruction and Rehabilitation Administration is a case in point. Where national income figures are reviewed and appraised in the light of reorganizing economic life and estimating the effect of such social aims as significant portions of the world's population being shifted in basic livelihood from agriculture to industry, income data of necessity must be accurate and capable of measuring the effect of such social changes.

Income data provided by ofttimes slow pre-war techniques were appraised in relation to development and validity of wartime procedures of expediency. The necessity for having data that reflected the current regulatory practice in adequate amount and reasonable time to shift and condition new patterns of social action clearly made war-time short-cuts and techniques an important new source of income data. How war-time regulatory agencies, civil and military alike, provided their own interpolation and extension of basic pre-war data is a contribution in time-saving and use that adds appreciably to a total fund of income information.

In a period of time in which society was consuming national income and wealth at a more rapid rate than production was increasing the wealth accumulation, interest and attention are to be expected in the pattern, amount and effect of current income consumption. Particularly was this phase of interest reflected in the papers before the Conference by representatives of domestic regulatory groups. Savings and the formulation of capital savings patterns are distinctly secondary to the primary war interests of appraising national income and its distribution for the purpose of tax determinations, and measuring consumer potentials in buying habits and volume.

Gerald E. Warren

DePauw University

Auditing Questions from the Professional Examinations. Myron M. Strain. (San Francisco: The Pacioli Press, 1946, Pp. iii, 159, $3.00.)

This is a revision of a study outline prepared by Myron M. Strain, Dean of the School of Accountancy, Golden Gate College, for use in the Graduate School of that College. It is intended primarily as an aid to stu-

dents preparing for practice and for the C.P.A. examination.

Most of the questions included in the text were taken from American Institute examinations. The questions are classified into the following twelve chapters or groups: Auditing Functions, Verification of Cash and Securities, Verification of Receivables and Deferred Charges, Verification of Inventories, Verification of Fixed Assets, Verification of Liabilities, Verification of Proprietary Equities, Verification of Revenue Accounts, Forms of Enterprise Organization, Auditing Cases Involving Fraud and Irregularities, Rights and Responsibilities of Auditors, and Auditing Problems Involving Questions of Ethics.

Most of the chapters or groups follow a general pattern which consists of Comments, Specimen Verification Program, Specimen Solutions to Questions, and Questions Without Comments.

The Comments include discussion of controversial matters, of auditing standards, concepts, terminology, and practice, and suggest bibliographical references related to the subject matter involved. The Specimen Verification Programs and Specimen Solutions receive very adequate treatment, and furnish the reader with excellent examples of proper form to be used in answering auditing questions. The Questions Without Comments consist of carefully selected questions from C.P.A. examinations, and they should prove very useful for review or practice by the student.

In the foreword the author makes some good suggestions and gives some sound advice to those who are preparing for the examination in auditing.

This publication is not intended to be used as a first textbook in auditing, but is primarily designed for preparation for the C.P.A. examination. It emphasizes the recent developments in auditing, and the techniques to be applied in giving satisfactory solutions to auditing questions. It should be of invaluable assistance to those who desire an up-to-date review of auditing practice and procedure, and should be particularly valuable to those who are conscientiously preparing for the C.P.A. examination.

C. A. Moyer

University of Illinois

RESEARCH REPORTS

To the Readers of the ACCOUNTING REVIEW:

In October, 1946, the officers of the American Accounting Association appointed a Committee, charging it with the task of re-examining the Association's Statement of Accounting Principles (reprinted below) to determine whether any revision was warranted. Perhaps the objective is to maintain the Statement of Principles in a state of continuing evolution rather than treat it as a completed project.

In any event, the readers of the ACCOUNTING REVIEW can be most helpful in this matter if they will express their opinions to the Committee as to (1) whether or not some revision is in order, (2) which sections or concepts need attention. Your committee will not only appreciate your expressions of opinion, it will promise to be influenced by them. Please address them to American Accounting Association, Committee on Statement Revision, Tappan Hall, University of Michigan at Ann Arbor.

Committee on Revision of the Statement of Accounting Principles

PAUL J. GRABER
T. W. LELAND
JAMES R. MCCOY
HALE L. NEWCOMER
E. L. KOHLER ('46) or
H. C. MILLER ('47) ex officio
HERBERT E. MILLER, *Chairman*

December 9, 1946

ACCOUNTING PRINCIPLES UNDERLYING CORPORATE FINANCIAL STATEMENTS*

PREFATORY NOTE

FIVE YEARS AGO this month the Executive Committee of the American Accounting Association published in the ACCOUNTING REVIEW a statement of "tentative principles" relating to the financial reports of corporations. Since then numerous criticisms of this effort have appeared and other groups have given serious attention to the formulation of accounting principles. The present Executive Committee of the Association believes that these efforts justify faith in the continued orderly development of accounting principles and in the ability of accountants to guide this development in accordance with their own high sense of social responsibility.

It should not be expected that any statement of principles can constitute the final word on the subject or that it can satisfy all accountants. Indeed, the Committee believes that basic accounting concepts should be given continuous study, to the end that the needs of those concerned with corporate reports, whether as managers, investors, members of regulatory bodies, or the general public, may be best served. It may be that these basic concepts will undergo less modification than changing current conditions seem to warrant, and certainly less than the language used in describing them. In any event, periodic restatements, and the discussions preced-

* Reprinted from the ACCOUNTING REVIEW of June, 1941.

ing and following them, can have only salutary effects.

In this restatement fundamental propositions concerning the functions of accounting in respect to cost, revenue realization, income, and capital are set forth briefly. These are followed by explanations and applications the list of which could be considerably expanded. The primary effort has been to bring out those points which are of the broadest significance or which have been the object of recent attention.

In the corporate field the most important use of accounting lies in the preparation of statements of financial position and of operating results. So many vital decisions of business and government depend on the interpretation of such statements that they have come to be of prime economic and social significance.

The subject may be approached by considering the uncertainties of corporate accounting practice which sometimes vitiate comparisons of published financial statements of different corporate enterprises, and even comparisons of the financial statements of the same enterprise for successive years. In some instances business managements and accountants have permitted themselves such freedom of action that published statements have been difficult of interpretation without extensive supplemental information.

To avoid these difficulties every corporate statement should be based on accounting principles which are sufficiently uniform, objective, and well understood to justify opinions as to the condition and progress of the business enterprise behind it. No one on casual inspection of financial statements can arrive at a thorough understanding of a corporation's affairs; but it should be possible for a person moderately experienced in business and finance to examine such statements with the expectation of deriving from them basic financial facts on which judgments may be premised.

Business enterprises so differ in nature that in the application of principles to any one organization some allowance must be made for its individual characteristics and for those of the industry. It should nevertheless be possible to agree upon standards of adequacy and reasonableness in the presentation of corporate financial statements which will eliminate variations in accounting procedure resulting not from the peculiarities of individual enterprises, but rather from the lack of acceptance of well-conceived, common standards.

The principles advocated here and their suggested applications represent levels of accounting practice departures from which should be viewed with concern. They do not by any means cover all the points at which difficulties are experienced, but they constitute a foundation on which more detailed and not inconsistent standards for a particular industry or enterprise can be built.

Differences in business enterprises and in management needs are nowhere better illustrated than in the varied forms of internal reporting, but whatever additional records and reports are required should not obscure the necessity of furnishing the stockholder, the creditor, and the general public with financial statements which adhere as far as possible to standards objectively determined.

THE BASIC ASSUMPTION

The purpose of periodic financial statements of a corporation is to furnish information that is necessary for the formulation of dependable judgments. A knowledge of the origin and expiration of the economic resources of a company and the resultant changes in the interests of its creditors and investors is essential to this purpose, and these facts should be expressed in such a manner as to make the financial statements both intelligible and, as far as possible, comparable with statements of other periods and

of other corporations. The reader of a statement should be able to assume that, in the absence of clear indications to the contrary, certain basic principles or standards have been followed. To achieve this end a unified and coordinated body of accounting theory is required.

A. COST

Factors of production and other resources of an enterprise are measured at the date of acquisition by costs incurred or amounts invested, on a cash or cash-equivalent basis, and at later dates by the balances of costs incurred or amounts invested after taking into account the effects of operation and other subsequent events. Similarly the rights of creditors and stockholders are measured initially by amounts contributed, on a cash or cash-equivalent basis, and subsequently reflect the cumulative results of operations, distributions, and other corporate activities.

1. Cost incurred is measured by cash outlay or by the fair market value of considerations other than cash. Where productive factors or other resources are acquired by donation or some similar process fair market value at the date of acquisition, carefully determined in the light of all available evidence, becomes the basic measure.

2. Costs incurred should be appropriately classified to facilitate tracing and absorption in terms of operating activity and accounting periods; for example, a primary basis of classifying fixed assets is that which separates depreciable from nondepreciable property. The total cost of the several classes of assets acquired by a lump-sum payment should be distributed after careful consideration of the nature and condition of each unit of property, intended use and prospective earning power, and other pertinent data.

3. For each accounting period there must be a determination of the amount of cost which has been absorbed in producing revenue or has otherwise expired, and also the amount of cost which is reasonably applicable to future operations. Diminutions or partial expirations of cost not subject to precise measurement must be determined largely upon the basis of business experience and expert opinion rather than by rigid formula. In each industry and in each enterprise reasonably consistent policies and procedures need to be developed. In the case of depreciable or amortizable resources the minimum requirement is that the cost of each asset be spread as uniformly as possible over its productive life.

4. Costs of productive factors or other resources which are no longer useful should be reduced to realizable value, if any; and in the case of resources to be continued in use or held for sale only such portion of their costs as may reasonably be assigned to future periods should be carried in the balance sheet.

5. The excess of the face or maturity amount of a liability over the cash or cash equivalent supplied by the creditor represents a form of interest payable at maturity; on a balance sheet the unaccrued portion of such interest should preferably appear as an offset to the maturity amount of the indebtedness. Conversely, the excess of the cash or cash equivalent supplied by the creditor over the maturity amount represents a liability payable from period to period as a part of nominal interest payments; on a balance sheet any unpaid portion of such liability should appear as an addition to the maturity amount of the indebtedness.

6. When a liability is retired, either at maturity or earlier, all related items should be eliminated from the balance sheet, including unpaid premium or unabsorbed discount and expense. Expenses incurred in retiring the obligation and any redemption premium, not including the cost of issuing new securities, should be absorbed in the period of retirement.

7. Values other than costs applicable to future periods should be treated in balance sheets as supplementary data, and then only when supported by substantial evidence. Such data should be adequately described and shown parenthetically, by footnote, or in separate schedules, to avoid obscuring the basic cost figures.

8. In the case of resources received in exchange for product or other assets, the selling price of the product or other assets, expressed in realizable cash terms, becomes the cost of such resources received for subsequent accounting purposes.

Comments:

The cost principle stated above, together with the examples of its application, is sufficiently definite to provide a common basis for statement procedure. It should be applied with enough flexibility to meet business and financial needs under all ordinary circumstances. A marked change in the value of money might impair the usefulness of cost records; however, such changes in price levels as have occurred in this country during the last half century have afforded insufficient reason for the adjustment of asset values.

The adoption of the cost principle eliminates the heterogeneous results of accounting practices which have permitted periodic revaluation of assets, up or down, in accordance with current price levels and temporary business developments. The history of cost and cost amortization constitutes an essential starting point in financial interpretation.

B. REVENUE

Revenue is measured by the realizable value, on a cash or equivalent basis, of the product of the enterprise, either goods or services. Revenue may be said to accrue, in a broad sense, as the process of production advances, but revenue is generally recognizable in the accounts only as validated by delivery of goods or services to customers, with concurrent acquisition of cash or cash equivalent.

1. Where the immediate consideration received from the customer is in a form other than cash the amount of revenue realized and recognizable is restricted to the cash value of the consideration. Where revenues are recognized in terms of accounts receivable periodic adjustments must be made for estimated returns, uncollectibles, and other offsets.

2. As a rule the recognition of revenue must await the transfer of legal title to the customer. In the construction industries, however, and in other special cases, the accounting for periodic revenue may properly begin with the billing of the customer as work in progress is approved, in conformity with the terms of the contract; or some other reasonable modification of the usual rule may be employed.

3. In the case of interest, rent, royalties and related forms of contractual revenues recognition on a strict accrual basis, in accordance with the conditions of the contract, is preferred practice.

4. Where the collection of the selling price of the product is spread over an extended period, or circumstances render collection in full highly uncertain, or substantial costs are incurred after the point of sale or delivery, the measurement of revenue strictly in terms of cash received for product furnished may be justified.

5. Discovery value, timber growth, and other forms of accretion are generally not to be recognized as realized revenue.

6. Appreciation or enhancement of existing units of property resulting from changing prices on the market does not represent realized revenue.

7. Revenue may be realized through the sale of resources not to be classed as product.

Comments:

Occurrences which make possible the

recognition and measurement of revenue vary with the character of business transactions. The most widely recognized occurrence is the act of delivering to customers the products or services of a business. In some instances, such as performance under long-term contracts, revenue may be recognizable before delivery or transfer of title. Other events may be satisfactorily recognized in certain industries, provided two conditions are met: the existence of an objectively determined basis of recognition and measurement, and consistency in practice from period to period.

C. INCOME

Income is measured by matching revenues realized against costs consumed or expired, in accordance with the cost principle. All such revenues and costs should be reflected in the income statement. Only in this manner can the income statements of a corporation express completely its entire income history for a period of years. For any one year the income statement should reflect all realized revenues, and all costs and losses written off during that year, whether or not they have resulted from ordinary operations.

1. The income statement for any given period should be divided into such sections as may be required to show not only particulars of revenues from and the expenses of the operations of the current period, measured as accurately as may be at the time, but also profits and losses from revenue realization and cost amortization not ordinarily associated with the operations of the current period.

2. The current-operations section of the income statement should disclose revenues realized and operating costs, including applicable depreciation and other amortization of assets. This section should be subdivided or departmentalized to show the sources and results of each major income-producing activity and to furnish information helpful in the determination of trends in revenues and expenses.

3. Other sections of the income statement should list in reasonable detail interest on borrowed money, adjusted for debt discount and premium; so-called capital gains and losses; extraordinary charges and credits to income, including substantial adjustments which may not be attributable to the ordinary operations of the current year; gain or loss from the discharge of liabilities at less or more than their recorded amount; and income and profits taxes.

4. Income should not be distorted or artificially stabilized by creating arbitrary reserves either by appropriating income or surplus or by overstating expenses in certain periods and subsequently charging to such reserves expenses and losses pertaining to succeeding periods. Earned surplus reserved for contingencies or for similar purposes does not lose its character as earned surplus; expenses or losses arising from contingencies thus anticipated should be reflected not as reductions of the reserve but in the income statement of the period in which they are recognized.

5. Corporate income is not affected by the issuance, purchase, or retirement of the corporation's own stock, from adjustments of capital-stock accounts, or from dividend distributions made by the corporation.

Comments:

The objective of the income principle is to develop a series of income statements which, for the life history of the corporation, will include all gains and losses. To this end the income statement for each fiscal period should show not only the items affecting current results, but also any adjustments for gains or losses which may not be regarded as strictly applicable to the operations of the current period but which have nevertheless been first recog-

nized in the accounts during the period. If net income is to have any meaning the factors influencing it must be isolated and given a distinct and unified expression. This is possible if all gains and losses are carried through a single medium to earned surplus. It is impossible if expense charges, losses, or income credits may be carried directly to surplus or to surplus reserve. This comment does not apply to operating reserves created by means of carefully determined charges to current operating expenses.

In view of the emphasis given to computations of earnings per share, and to other measures of corporate performance, a common yardstick is needed. The fact that it may not be possible to measure precisely at the end of any year all costs which have been acquired or dissipated during that year makes it essential to encompass within a single statement, not only the best possible measure of income from ordinary operations, but also gains and losses from events not always associated with the transactions of a single year.

D. CAPITAL

Corporate capital, the equity of stockholders of all classes in the enterprise, consists of two major divisions—capital paid in by present and past stockholders, and earned surplus—which must be segregated and clearly differentiated on the balance sheet. No transfers may be made from the former to the latter either directly or indirectly. Where corporate laws permit the payment of dividends from paid-in capital, the extent to which paid-in capital is available for that purpose should be indicated on financial statements.

1. Paid-in capital is initially measured by amounts received for shares issued, whether recorded on the books as capital stock or paid-in surplus. It may be increased by credits from the reissue of shares reacquired, and transfers from earned surplus to capital-stock account by means of stock dividends, recapitalizations, or otherwise. It may also include amounts contributed by persons other than stockholders. Reductions of paid-in capital may be caused by the redemption or other reacquisition of outstanding shares, payments of liquidating dividends, and the absorption of a deficit.

2. Earned surplus should be credited or charged only with the following: the balance of periodic net income; distributions to stockholders, including amounts credited to paid-in capital upon the issuance of stock dividends; amounts transferred to and from earned-surplus reserves; and losses recognized in recapitalizations. Earned surplus should include no credits from transactions in the company's own stock or transfers from paid-in capital accounts.

3. Reserves set aside to indicate the manner in which profits have been invested or to reflect contingencies are subdivisions of earned surplus and should not be used for the absorption of expenses or losses, or for the writedown of tangible or intangible assets. Charges for all cost amortization and asset values expired should be by way of the income account.

4. A reduction of the par or stated value of capital stock for the purpose of absorbing a deficit should be approved by stockholders, and earned surplus thereafter should be so labeled as to indicate that it dates from the time the deficit was eliminated.

5. Periodic reports should contain analyses of changes in paid-in capital and earned surplus, including sales, purchases, conversions, and exchanges of capital stock, stock dividends, and transactions affecting earned-surplus reserves.

6. Paid-in surplus created by a reduction in the stated value of preferred stock without a corresponding reduction in its liquidation preference should be appropri-

ately designated and shown in conjunction with the reduced stated value of the preferred stock. In all cases the preference upon liquidation should be disclosed.

7. The outlay for reacquired shares of capital stock, provided the shares are reissuable, should be shown on the balance sheet as an unallocated reduction of capital stock and surplus, and any consequent restriction on surplus distributions should be disclosed. If the shares are not reissuable, or if they acquire the status of unissued or retired shares, such outlay should be charged to capital-stock account up to the amount by which capital stock has been formally reduced; the balance remaining should be charged to paid-in surplus, if any, up to an amount not in excess of the prorata portion of the paid-in surplus applicable to that class of shares; any part of the outlay which cannot thus be absorbed should be charged to earned surplus as constituting a distribution thereof. In case shares are retired at a figure less than their par or stated values, the resulting credit should be made to paid-in surplus. The excess of the reissue price of reacquired shares over their cost is paid-in capital; an excess of cost over the reissue price is in effect a distribution to a retiring stockholder and hence is chargeable to earned surplus.

Comments:

The application of the capital principle is handicapped in some degree by conflicting provisions of corporation laws. It is not necessary, however, to adopt in accounting practice the interpretations and expedients found in various corporation acts. The principle suggested above represents at most some restriction on procedures which may have been legalized but which are not in accord with commonly accepted accounting methods.

The objective in these applications is to make an effective distinction between contributed capital and capital accumulated as a result of earnings. Attainment of this objective requires that no portion of any stockholder's contribution be credited to earned surplus, although the retirement of a stockholder's equity may involve a distribution of earned surplus if the amount paid exceeds his prorata portion of paid-in capital.

When capital has been contributed to a corporation for permanent use, or has been dedicated to that use through the issue of a stock dividend, it should not be used later to increase earned surplus, either through absorption of losses or write-offs, or through direct credit. The only exception occurs when a deficit in earned surplus is eliminated through a restatement of capital equities approved by stockholders; and in such cases future statements of earned surplus should designate the point of time from which the new surplus dates.

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Charles Galvin	M.B.A., C.P.A.
William Ikert	B.A.
Howard Lowe	B.S.
Harold Niemi	B.S.
Richard L. Smith	A.B.
Granvil Specks	B.B.A.
Assistant:	
Harold Carlstead	C.P.A.
Arthur Johnson	B.S.
Anthony Nocita	B.S.
George Pringle	B.S.
Edward Rennhack	C.P.A.
Jean Schafer	A.B., C.P.A.
Leslie Scroggs	A.B.
Leonard W. Pedersen	B.S.C., C.P.A.
Charles Van Norden	M.B.A.

UNIVERSITY OF OKLAHOMA

Professor:	
Dewey L. Barnes	M.B.A., C.P.A.
William K. Newton (chairman)	M.B.A., C.P.A.
Associate Professor:	
Vol Gene Edmondson	M.A., C.P.A.
Assistant Professor:	
Earl Clevenger	M.S., Ed.D.
Wm. W. Whiteman, Jr.	B.A., LL.B., B.S., C.P.A.
Instructor:	
John F. Chaney	B.S.
Elbert V. Silver	B.A., M.L., C.P.A.
George R. Sullivan	B.S.

UNIVERSITY OF OREGON

Professor:	
J. H. Band	Ph.D.
O. K. Burrell	M.A., C.P.A.
C. L. Kelly	M.A., C.P.A.
A. B. Stillman	M.B.A.

Associate Professor:
D. D. Gage Ph.D.
C. F. Ziebarth M.A.
Assistant Professor:
N. E. Eggimann M.S.
L. M. Faust B.S.
J. M. Smith M.A.
Instructor:
A. L. Peiterson B.S.

UNIVERSITY OF PITTSBURGH

Professor:
Robert D. Ayars M.A.
C. L. Van Sickle (head) M.A.
Associate Professor:
Stanley F. Jablonski M.B.A., C.P.A.
Assistant Professor:
John W. May M.A.
Lecturer:
Robert Albright B.S.
Ralph L. Appel A.B
M. Emerson Good B.S.
Joseph P. Wallace B.S.
Instructor:
Edward B. Malloy B.S.
James H. Rossell M.L.
Frank N. Willetts B.S.

ROOSEVELT COLLEGE

Professor:
Samuel W. Specthrie (chairman) M.B.A., C.P.A.
Associate Professor:
Milton D. Block Ph.B., C.P.A.
Assistant Professor:
Walter F. Cebelin M.A.
Marvin L. Channon B.A., C.P.A.
Edward Gordon A.B., M.B.A.
Lecturer:
Louis H. Bernson B.S.C., C.P.A.
William Bolotin C.P.A.
William P. Broker B.S.C.
Jacob Goldberg C.P.A.
Frederick K. Rabel M.B.A., Dr. Jur., C.P.A.
Ennes C. Rayson A.B., C.P.A.
Irving Tenner Ph.D., C.P.A.
Sidney Waller B.S.C., C.P.A.

UNIVERSITY OF ROCHESTER

Associate Professor:
Frank P. Smith Ph.D.
Instructor:
A. B. Dickerman M.B.A.

ST. LOUIS UNIVERSITY

Professor:
Gustave K. Klausner M.C.S.
John J. Lang (head) C.P.A.
Associate Professor:
R. Murray Cantwell A.M., C.P.A.
Assistant Professor:
Walter E. Braeckel B.S., C.P.A.
Arthur W. Guntly M.S.
Lecturer:
Donald J. Boland
Joseph Bounk B.S.
Frederick H. Brenner B.S.
John Bruen C.P.A.
John E. Cheely B.S.
Ernest A. Clark C.P.A.
Russell W. Coleman C.P.A.
LeRoy W. Dews B.S.
Thomas Donohue B.S.
Charles Forrest B.S.
John J. Glynn B.S.
Jerome Godaire B.S.
Daniel C. Hurley M.S.
Gus V. Keller C.P.A.
Raymond T. Knefel B.S., C.P.A.
Chris W. Kotthoff
Charles W. Langdon B.S.
Francis M. Linek B.S.
George McElroy M.A.
John C. Meyers B.S.
Richard J. Milles B.S.
John M. Murphy
Maurice F. O'Connor B.C.S.
Patrick J. Potts A.B.
Thomas A. Proctor B.S.
Alois S. Reck B.S.
John W. Schlosser
George A. R. Schuster A.B., C.P.A.
William J. Slais C.P.A.
Alexander J. Smith C.P.A.
John W. Snider C.P.A.
Robert F. Wertz A.B., M.B.A.
Louis B. Zwart C.P.A.
Instructor:
Justin L. Albers B.S.
Val J. Beckerle B.S.
Robert E. Carmody B.S.
Thomas M. Cavender B.S.
Paul M. Dauten B.S.
Bernard W. Fagan B.S.
Curt G. Friehs B.S.
George R. Holleman B.S.
John L. McDaniel B.S.
Roy C. Meyers B.S.
Edwin A. Paradoski C.P.A.
William C. Reher B.S.
Bonnie F. Sims B.S.
Charles E. Wuller M.S.
Eugene L. Zieha B.S.

TULANE UNIVERSITY OF LOUISIANA

Professor:
L. J. Buchan (dean) Ph.D., C.P.A.
Paul C. Taylor Ph.D., C.P.A.
J. C. Van Kirk M.B.A., C.P.A.
Instructor:
Seymour J. Harris M.B.A., C.P.A.
George E. Nunn B.B.A., C.P.A.
Assistant:
Norton M. Bedford B.B.A.
Clifford C. Lasberg, Jr. B.B.A., C.P.A.

TEXAS A AND M COLLEGE

Professor:	
Nelson D. Durst	M.S., C.P.A.
T. W. Leland (head)	M.S., C.P.A.
Associate Professor:	
W. Fred Farrar	M.B.A.
Phillip B. Goode	B.S., LL.B.
Assistant Professor:	
Walter S. Manning	M.B.A.
Instructor:	
Frank L. Hays	B.S.
Thomas D. Letbetter	B.B.A.
Eugene M. White	B.A.

UNIVERSITY OF TULSA

Professor:	
Paul Graber	M.A.
Associate Professor:	
Raymond C. Ingram	M.A., C.P.A.
Lecturer:	
A. L. Breneman	B.S., C.P.A.
A. L. Cotham	B.S.
Bartlett F. Crawford	B.S., C.P.A.
Merton H. Diels	M.S.
R. W. Olsen	B.S., C.P.A.
Glenn Stimmel	M.B.A.
George F. Winters	C.P.A.

UNIVERSITY OF TENNESSEE

Professor:	
Harvey G. Meyer (head)	M.A., C.P.A.
W. H. Read	M.A., C.P.A.
Assistant Professor:	
Edward E. Judy	B.A.
Robert M. Pool	M.A.
Instructor:	
E. H. Bozeman	LL.B.
John A. Cordell	B.A.
Melvin E. Everhart	B.A.
Albert M. Miller	M.A., C.P.A.

UNIVERSITY OF VIRGINIA

Professor:	
Maximilian Albert Julius Barlow	A.B., B.B.A., C.P.A.
Assistant Professor:	
Frank Sanford Kaulback, Jr.	M.A., Ph.D.
Lecturer:	
Robert Metcalfe Musselman	M.A., LL.B., C.P.A.

WASHINGTON AND LEE UNIVERSITY

Professor:	
Almond R. Coleman	M.B.A., C.P.A.
Assistant Professor:	
Branson B. Holder	Ph.D.
Edwin H. Howard	M.S.

UNIVERSITY OF WASHINGTON

Professor:	
William E. Cox (head)	M.A.
Homer E. Gregory	M.A.
Donald H. Mackenzie	M.B.A., C.P.A.
Jas. M. McConahey (chairman)	M.S., LL.B., C.P.A.
Associate Professor:	
Arthur M. Lorig	M.A., Ph.D., C.P.A.
Assistant Professor:	
Julius A. Roller	B.B.A.
Associate:	
Elbert D. Peasley	B.B.A.
Lecturer:	
O. E. Draper	M.A.
John V. Fordon	M.B.A.

WASHINGTON UNIVERSITY

Professor:	
William S. Krebs (head)	A.M.
Associate Professor:	
Samuel A. Marsh	A.B.
Lecturer:	
Laurence K. Arthur	B.S.
Thomas E. Blackwell	M.S., J.D.
J. Harry Bridge	C.P.A.
Clarence Darnton	B.S.
Helen Duncan	B.S.
John H. Ernest	M.S.
Anthony E. Good	C.P.A.
Frank Grindler	B.S.
George W. McCoy	C.P.A.
James J. Ritterskamp, Jr.	B.S., LL.B.
A. Carl Tietzen	B.S., C.P.A.

WAYNE UNIVERSITY

Professor:	
George R. Husband	Ph.D.
Associate Professor:	
Edwin C. Walmsley	A.M., C.P.A.
Assistant Professor:	
Edward G. Eriksen	A.M.
Harry M. Landis	A.M.
Instructor:	
James F. Wallis	A.B.

COLLEGE OF WILLIAM AND MARY

Professor:	
Wayne F. Gibbs	M.S.
Assistant Professor:	
Frank L. Roberts	M.B.A.
Lecturer:	
Robert Armistead	B.S., B.C.L.
I. L. Jones, Jr.	B.S.

WESTERN RESERVE UNIVERSITY

Professor:	
Thomas M. Dickerson	M.B.A., C.P.A.
Associate Professor:	
Edward D. Trembly	M.B.A., C.P.A.
Assistant Professor:	
William F. Conway	M.B.A.
William C. Henry	M.B.A.
John W. Pooley	M.S.
Lecturer:	
Howard K. Andrews	B.B.A.
Harold K. Clark	M.B.A.
John W. Coltman	LL.M., C.P.A.
E. Howard Come	A.B., LL.B.
O. A. Digel	A.B., C.P.A.
Howard W. Domeck	A.B.
John F. Drake	M.A., C.P.A.
William W. Duffus	B.S.
Nelson Friedman	A.B., LL.B.
Norman A. Gutfeld	LL.B.
Harold Kimball	M.A.
William F. Michalske	A.B., C.P.A.
Clarence A. Mueller	C.P.A.
Charles A. Nowacek	M.A., C.P.A.
Charles W. Plum	B.S., C.P.A.
Raymond E. Ransford	M.A.
Earl Tucker	B.B.A.
Alan W. U'Ren	Ph.M.
S. Orville Walthall	M.B.A., C.P.A.
George R. Zeiger	B.S., C.P.A.
Instructor:	
Andrew D. Braden	B.S.
Herbert W. Kane	B.B.A., LL.B.
Robert R. Love	M.S.

ASSOCIATION REPORTS

Program of the Annual Meeting

The American Accounting Association held its annual convention at the Palmer House in Chicago, Illinois on September 6 and 7. The selection of these dates was in accordance with the preference of the members as indicated by the mail poll conducted earlier in the year. One Hundred and Sixty members and guests were registered. The Program was as follows:

FRIDAY, SEPTEMBER 6

Registration. *9:00 a.m. to 10:00 a.m.*

First Session, 10:00 a.m. to 12:00 Noon

TOPIC: Recent Developments
CHAIRMAN: Andrew Barr, Securities and Exchange Commission
"Cost Accounting in Price Control," Paul M. Green, Office of Price Administration
"Financial Statements for Corporate Annual Reports," William Blackie, Caterpillar Tractor Co.
"Present Day Audit Techniques," Roy Andreae, Price Waterhouse & Company

Second Session, 2:00 p.m. to 5:00 p.m.

TOPIC: Problems in Education
CHAIRMAN: Thomas W. Leland, Agricultural and Mechanical College of Texas
"Guidance Tests for Accounting Students," A. C. Littleton, University of Illinois
"Correspondence Courses in Accounting Education Program," Stephen Gilman, International Accountants Society, Inc.
"College Education as a Requirement for Certified Public Accountants; the New York Experience."
"From the Point of View of the Examiner," Norman E. Webster, Webster, Horne & Elsdon
"From the Point of View of the Practitioner," Raymond G. Ankers, Lybrand, Ross Bros. and Montgomery

Third Session, 7:00 p.m.

Dinner and business meeting, reports of officers and committees, and election of officers
Address: "Advances in Government Accounting," Coleman Andrews, U. S. General Accounting Office

SATURDAY, SEPTEMBER 7

Fourth Session, 9:30 a.m. to 12:00 noon

ROUND TABLE: Restoration of Asset Values to the Balance Sheet
CHAIRMAN: James L. Dohr, Columbia University
Affirmative:
Carman G. Blough, American Institute of Accountants
William A. Paton, Universty of Michigan
George D. Bailey, Ernst & Ernst
Negative:
Howard C. Greer, Kingan & Company
Edward A. Kracke, Haskins & Sells
Eric L. Kohler

Fifth Session, 2:00 p.m. to 4:00 p.m.

TOPIC: Problems in Accounting Theory
CHAIRMAN: Edward A. Gee, Michigan State College
"Cost Analysis for Equipment Replacement," Walter B. McFarland, McGill University
"Influence of Tax Concepts in Accounting Theory," Willam H. Roberts, Murphy, Lanier and Quinn
"Deferred Maintenance as Related to Depreciation Methods," Carl T. Devine, University of Pennsylvania

On Friday evening the regular business meeting of the Association was held in connection with the annual dinner. Eighty members and guests attended.

President Kohler opened the business meeting with the following remarks:

"A number of problems confront the Association which I would like to mention to you tonight. They are of the type that do not call for formal action on the part of the Association's membership but they do concern the process by which the work of the Association is carried on. All of you know that the Association does not have even one full-time employee. The Association's secretary and editor each receive a pittance which by any standard or commercial measurements is certainly inadequate, and I am sure that the Association's

members are grateful not only to these individuals but also to the educational institution which permit this attention to the work of the Association. Ordinary administrative matters within the Association are disposed of by the secretary and the president, and general policy questions are matters for determination by the president and the executive committee. Some of us who figured in the reorganization of the Association during the annual meeting at the close of 1935 hoped that this structural simplicity might free the executive committee from organizational problems and thus encourage the committee, with some sort of official feeling of overall responsibility in a technical field, to enter upon projects which might be concerned with furthering conceptual growths in that field.

"I need not remind most of you of the four-fold purpose of the association: (1) to encourage and aid accounting research, (2) to formulate and seek the adoption of accounting principles and standards, (3) to promote studies of accounting as an agency of social control, and (4) to improve instructional standards and seek to diffuse a more widespread knowledge of accounting. As I look back over the ten-year period during which these ideals have been the Association's objectives, I can see that a good deal has been accomplished in those directions, not only by the Association, but by others as well. The Association has published a number of worth-while research monographs and is considering others for publication; a statement of accounting principles was published in 1936 and again, slightly modified, in 1941; and the expansion of the demand for accounting instruction has vastly increased the spread of accounting knowledge in commercial circles and in public life generally. Many members gave unstintingly of their time to war projects and assisted in the development and maintenance of practical controls over war-industry activities. In the setting of consumer-price limitations and war-agency pricing policies, and in contract negotiations and settlements, the role of the accountant was paramount; not only was his judgment as to policies sought but he played a major part in their administration and enforcement. The gains which accounting made as a control device during the war years were so great that it will take a considerable period of time to translate this development into instructional materials and into procedures that may be used with advantage in industry generally. We are today still in the midst of trying to catch up with and properly evaluate these gains.

"It has not been easy this year to put the Association to work. With but few exceptions, no one wanted to serve on committees. The executive committee at the beginning of the year declined to undertake the task of revising the Association's statement of principles. I dislike accusing my fellow-members on this committee of timidity and I shall not do so; I think it would be fairer to say that their recently doubled academic duties have left them none of the leisure which it once was the object of the committee work to destroy. But more serious has been the absence of our annual meetings. On these occasions, in past years, we found that we were members of an organic unit which imposed on us the obligation of acting with energy, drive, and purpose. Those incentives during the war years with no meetings grew remote. I am hopeful that our relations today and tomorrow may be such as to revive, to some degree, these qualities in each of you. Certainly if the Association is to remain a living force in the accounting field and is to continue to do its bit in advancing the art, it can do so only with the active cooperation of more of its members. What is more, the members owe it to themselves. The large number of problem remaining to be solved stand as a challenge

to the intellectual maturity of the individual as well as his profession. In such participation it would be fatal if we should limit ourselves to discussing both sides of a question, as some of our members have urged, and letting it go at that. There can be little intellectual satisfaction to creative minds if decisions are not to be reached: decisions which may lead to firm positions by the Association as a whole. Moreover, if our Association can be more active in these matters, it will tend to free the growth of accounting concepts from the after-the-fact influences which in the hands of accounting practitioners have the effect of justifying current, not-well-conceived procedures, and preventing the orderliness of that growth.

"The plan I propose for the Association for the remainder of this year is this: A new group of officers is about to be selected for the calendar year 1947. During the next 60 days I will endeavor to appoint new committees whose tenure until next September—a year from now—can be assured, where practicable, through the adoption of a work program and the choice of individuals agreeable to the incoming president and, if need be, his executive committee. Our previous practice has been to have the incoming group launch a new program and appoint new committees immediately, without any prior opportunity of observing the effectiveness or lack of it, of existing programs and committees. The procedure I now suggest can be accomplished without formal Association action and I hope that those of you who are called upon to participate in committee work during the next month or two will do so with the added incentive of having a longer period in which to formulate and carry through a program, and with the knowledge of a better continuity of committee programs between successive administrations."

The nominating committee consisting of H. T. Chamberlain, Chairman, H. T. Scovill, R. A. Stevenson, J. B. Taylor, and S. A. Winter presented nominations for officers of the Association for the calendar year 1947.

President, Professor Hermann C. Miller, Ohio State University

Vice-Presidents, Victor Z. Brink; Professor Ernest C. Davies, Northwestern University; Professor R. E. Glos, Miami University

Secretary-Treasurer, Professor Cletus Chizek, University of Chicago

Editor, Professor R. Dixon, University of Michigan

Director of Research, Professor T. W. Leland, A. & M. College of Texas

Past Presidents, E. L. Kohler; Harvey G. Meyer, University of Tennessee; Carman Blough, American Institute of Accountants

It was moved and seconded that the secretary be authorized to cast the unanimous ballot for the election of the officers nominated. The motion carried.

The Secretary-Treasurer gave a brief interim report of the financial condition. A copy of the financial report will be included in this issue of the ACCOUNTING REVIEW.

ERNEST C. DAVIS
Secretary-Treasurer